ACTION REPORT AND MINIBOOK
STATE WATER CONTROL BOARD MEETING
THURSDAY, DECEMBER 14, 2006
HOUSE ROOM C, GENERAL ASSEMBLY BUILDING
9TH & BROAD STREETS
RICHMOND, VIRGINIA

Convened - 9:04 A.M.

Board Members Present:

W. Shelton Miles, III, Chair
Thomas D. C. Walker
Robert H. Wayland, III
Michael McKenney
Komal K. Jain, Vice-Chair
W. Jack Kiser
John B. Thompson

Minutes	Approved Minutes
Final Regulation: Virginia Water Protection Permit Amendments	Adopted Amendments
Permits	
The Galleria, Chesterfield Co.	Voted to Reconsider and Issued Permit
Merck & Co., Stonewall Plant	Issued Permit
Southern Pines Pollution Control Plant	Issued Permit
City of Newport News	Voted to Reconsider and Issued Permit with Amendments
Regulatory Petition: Boston Water & Sewer Company	No Regulatory Action Authorized
Significant Noncompliance Report	Received Report
Consent Special Orders – Virginia Pollution Abatement Permit Programs	Approved Orders
Northern Regional Office	
Winston Acre Farm	
Consent Special Orders - Virginia Pollutant Discharge Elimination System Permits	Approved Orders
Northern Regional Office	
City of Fredericksburg WWTF	
Minarchi Mobile Home Park, Caroline Co.	
Pilot Travel Centers, LLC, Caroline Co.	
Woodbridge MHP STP, Prince William Co.	
West Central Regional Office	
Town of Fincastle, Botetourt Co.	
Town of Stuart WWTP, Patrick Co.	
Western Virginia Water Authority, Roanoke	
Tidewater Regional Office	
Colonna's Ship Yard, Inc., Norfolk	
Sims Group USA Corp., Chesapeake	
Whispering Pines, Inc., Accomack Co.	
Southwest Regional Office	
Dickenson Co. PSA, Haysi STP	

South Central Regional Office
Newton Mobile Home Court, Inc., Mecklenburg Co.
Piedmont Regional Office
BR-1998, LLC, Richmond
Lee's Mobil, Inc., Hanover Co.
Powhatan Co., Fighting Creek WWTP
Valley Regional Office
Skyline Swannanoa, Inc., Waynesboro
Smiley's Fuel City, LLC, Rockbridge Co.

Consent Special Orders – VWP and Other Programs — Approved Orders

Valley Regional Office
Alvin R. Moomau, Augusta Co.
Tidewater Regional Office
R. L. Bowman, Isle of Wight Co.
Grayco, Inc., Isle of Wight Co.
Hearndon Construction Corp., Chesapeake
Piedmont Regional Office
The Hanover Group, LLC, Hanover Co.
West Central Regional Office
Vaughn & Jackson, LLC, Roanoke Co.

Proposed Regulation: Aboveground Storage Tank and Pipeline Facility Financial Responsibility Requirements — Authorized Public Comment

Public Forum — No Speakers

Other Business

FY2007 Revolving Loan Funding List — Approved List
City of Lynchburg – Combined Sewer Overflow Matching Fund Grant — Authorized Grant
Future Meetings — Tentative Mar. 15-16, 2007 (Note: probably be Mar. 8-9, 2007)
Reconsideration Guidance/Procedures — Directed Staff to Develop Guidance

ADJOURNED – 5:55 p.m.

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions arising as to the latest status of the agenda should be directed to Cindy M. Berndt at (804) 698-4378.

PUBLIC COMMENTS AT STATE WATER CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for their consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period and one public meeting) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period and one public hearing). Notice of these comment periods is announced in the Virginia Register and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For CASE DECISIONS (issuance and amendment of permits and consent special orders), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. If a public hearing is held, there is a 45-day comment period and one public hearing. If a public hearing is held, a summary of the public comments received is provided to the Board for their consideration when making the final case decision. Public comment is accepted on consent special orders for 30 days.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

> REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who participated in the prior proceeding on the proposal (i.e., those who attended the public hearing or commented during the public comment period) are allowed up to 3 minutes to respond to the summary of the prior proceeding presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.
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> CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of this permit. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then, in accordance with § 2.2-4021, allow others who participated in the prior proceeding (i.e., those who attended the public hearing or commented during the public comment period) up to 3 minutes to exercise their right to respond to the summary of the prior proceeding presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.
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> POOLING MINUTES: Those persons who participated in the prior proceeding and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who participated during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. For a regulatory action should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, an additional public comment period may be announced by the Department in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than pending regulatory actions or pending case decisions. Anyone wishing to speak to the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentation to not exceed 3 minutes.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; fax (804) 698-4346; e-mail: cmberndt@deq.virginia.gov.

Final Amendments to the Virginia Water Protection Program Permit Regulation (9 VAC 25-210): This memo provides the Board background information on the development of amendments to the Virginia Water Protection Permit Regulation, the substance of the final amendments to the regulation and changes from proposed, the incorporation of key concepts and language from the discussions of the Minor Surface Water Withdrawal Technical Advisory Committee (WP5 TAC), issues raised during the public comment period, and issues raised during a joint meeting of the Virginia Water Protection Permit Water Permitting Technical Advisory Committee (VWP TAC) and the WP5 TAC. These are final amendments to the existing regulation. Staff intends to ask the Board for adoption of the amendments to the Virginia Water Protection Permit (VWPP) Regulation (9 VAC 25-210). In addition to a number of administrative amendments that will allow for a more efficient and understandable application, review and issuance process, the changes to the VWPP regulation contain changes resulting from two concurrent Technical Advisory Committee processes and public review of draft amendments. Substantive changes to the regulation resulting from deliberations and discussions of the VWP TAC include: 1) clarification of water withdrawals excluded by statute from permit requirements and the conditions related to those exclusions; 2) the institution of a new pre-application panel and public information meeting process for surface water projects; 3) the creation of an Emergency Virginia Water Protection Permit for public water supplies during drought; 4) the inclusion of new language regarding permit conditions for withdrawals in the Potomac River consistent with the Potomac Low Flow Allocation Agreement; 5) new language defining the evaluation of cumulative impacts to instream flow; 6) clarification of an applicant's requirement to conduct an alternatives analysis; 7) the creation of a new variance provision to address temporary relaxation of permit conditions during drought; and 8) establishment of a new joint public notice process for surface water projects requiring both a VWPP and a Virginia Marine Resources Permit. Additional changes to the regulation are the result of the incorporation of key concepts and language from the WP5 TAC process and the proposed General Permit for Minor Surface Water Withdrawals. These amendments: 1) establish a distinction between major (90 million gallons per month or greater) and minor (less than 90 million gallons per month) surface water withdrawals; 2) provide for regulatory exclusions for certain surface water withdrawals from VWPP requirements; 3) create a reporting requirement for some surface water withdrawals excluded from VWPP requirements; 4) create a streamlined application process for new or expanded minor surface water withdrawals; 5) establish applicable permit standards for new or expanded minor surface water withdrawals, and 6) clarify the requirements for evaluation of project alternatives for minor surface water withdrawals for public surface water supply withdrawal projects. This regulation has been forwarded to the Office of the Attorney General for determination of statutory authority but this determination has not been made. The amendments will be proposed "contingent upon the determination by the Office of the Attorney General that the Agency has statutory authority" if the determination is not received by the December 14, 2006 Board meeting. As noted above, this rulemaking includes the key concepts and language from another regulatory action, the establishment of a General Permit for Minor Surface Water Withdrawals (9 VAC 25-800). Staff will recommend withdrawal of this proposed regulation in accordance with the Board's Public Participation Guidelines.

These amendments are the result of the combination of a number of concurrent efforts and processes including: the VWP TAC that developed amendments through a seven month consensus based process; comments received during a public comment period on the proposed amendments; the WP5 TAC that attempted to establish a General Permit for Minor Surface Water Withdrawals during a lengthy consensus based process; incorporation of key concepts and language from the WP5 TAC process into the VWPP regulation; modifications to key concepts and language from the WP5 TAC process based on comments from the VWP TAC and WP5 TAC before and during a joint meeting of both TACs on October 26, 2006; and administrative changes made to accommodate various inclusions and deletions and for clarity.

The extended drought of 1999-2002, prompted Governor Warner to mobilize an effort at DEQ to assure that the Commonwealth has comprehensive water supply planning and permitting processes. The first step in this effort was the development of the Local and Regional Water Supply Planning regulation (9 VAC 25-780, adopted by the Board June 28, 2005). During the lengthy consensus based effort to develop water supply

planning regulations several related water withdrawal permitting issues were identified. As part of that consensus process, DEQ agreed to issue a Notice of Intended Regulatory Action to consider potential changes to the VWPP regulation and to develop a VWP general permit for minor surface water withdrawals to address these issues. A Notice of Intended Regulatory Action to consider amendment to the VWPP regulation was published in the Virginia Register on January 24, 2005. A public meeting was held on February 23, 2005 and the public comment period ended on March 4, 2005. One commenter submitted comments during this period.

While the majority of the proposed VWP amendments are being made to compliment the comprehensive water supply planning process adopted by the board, two legislative changes and one judicial change should be noted that are incorporated in this proposed action. The 2003 session of the General Assembly enacted legislation requiring the Agency to develop an Emergency VWPP for public water supplies during periods of drought. This legislation requires an expedited permit issuance process for surface water withdrawals to support public water supplies impacted by drought conditions. The 2005 General Assembly passed legislation requiring coordination of DEQ and Marine Resource Commission permit processing for water supply projects. The legislation requires joint public notice and requires the two agencies to issue their permits within one year of each other whenever possible. The recent Virginia v. Maryland decision by the United States Supreme Court held that Virginia surface water withdrawals in the Potomac River do not require Maryland permits. This ruling changes the application of the VWPP regulation in the Potomac River where Virginia permits had not previously been required.

The original VWP TAC addressed issues related to surface water withdrawal permitting issues and concerns. The proposed amendments developed through the VWP TAC process were accepted by the Board at its meeting on September 27, 2005. Public Hearings to receive public comment on the proposed amendments were held in 2006 in Glen Allen; Lynchburg and Woodbridge. A total of 19 members of the public attended these meetings with 5 offering comments. The amendments developed through the VWP TAC process and subsequent public hearing comments were reviewed by staff and compiled into a set of amendments for review by the Board.

These amendments included: a number of new definitions addressing water withdrawal permitting issues and concepts; significant new language outlining the nature and extent of the statutory exclusion provisions for surface water withdrawals; conditions under which DEQ will consider an intake abandoned; a requirement for excluded users to furnish DEQ with an estimate of their excluded water use by providing the maximum withdrawal capacity of the intake structure; establishment of a Pre-Application Review Panel; clarification of the administrative requirements for Emergency Virginia Water Protection permits for public water supplies during drought; clarification of the requirements for a revised application; establishment of conditions applicable to surface water withdrawals for the determination of instream flow conditions and cumulative impact analysis; consideration of Virginia's responsibilities as a signatory to the Potomac River Low Flow Allocation Agreement; new language for surface water withdrawal projects to address the identification of project purpose, establishing the project need, and evaluating alternatives to address the established need; establishes specific options for providing compensatory mitigation for unavoidable wetland impacts; clarification of the coordination of state agency reviews and comments for water supply projects in the permit process; creation of a variance procedure for temporary relief from VWPP permit conditions; clarification of the rules for modification, revocation and reissuance, transfer and termination of VWP permits; clarification of the duration of VWP permits; and numerous administrative and editorial changes. These amendments were originally scheduled for consideration by the Board at their September 2006 meeting.

However, because of issues and concerns that arose during the concurrent efforts by the WP5 TAC to develop a general permit for minor surface water withdrawals dealing with issues related to minor surface water withdrawals which were not addressed by the VWP TAC, consideration of these amendments was postponed until the December 2006 Board meeting. Staff has taken the key concepts and language developed during the WP5 TAC process and incorporated them into the proposed VWPP regulatory amendments. These recommended additions to the amendments have been reviewed by both the VWP TAC and the WP5 TAC members and a number of interested parties through an email notification and a Joint TAC meeting held on Thursday, October 26, 2006. The resulting combined VWPP regulatory amendments are being presented to the Board for their consideration. Since the key concepts and language dealing with minor surface water withdrawals has been incorporated in the proposed VWP amendments, staff is recommending that the general permit for minor surface water withdrawals (WP5) be withdrawn.

AMENDMENTS OF SUBSTANCE AND CHANGES

Definitions. Section 9 VAC 25-210-10 contain new definitions for “major” and “minor” surface water withdrawals which establish 90 million gallons per month as the threshold withdrawal limit to distinguish these categories of withdrawals.

Exclusions. Section 9 VAC 25-210-60.B provides for the exclusion of certain categories of surface water withdrawals from VWP permit requirements and identifies specific exclusions. Section 9 VAC 25-210-60.B.3 provides for an exclusion for existing lawful unpermitted surface water withdrawals initiated between July 1, 1989 and the effective date of these amendments and establishes information and reporting compliance requirements. Sections 9 VAC 25-210-60.B.4 thru 15 identify specific surface water withdrawal categories that are excluded from VWP permit requirements. Thirteen of the specific exclusions included in this section were derived from consensus of the general permit WP5 TAC. Section 9 VAC 25-210-60.C. allows the Board to require a permit for any exclusion identified in Sections 9 VAC 25-210-60.B.3 through 15 if adverse impacts occur. It should be noted that the exclusions contained in Sections 9 VAC 25-210-60.B.1 and 2 are based directly on legislation and the recapture clause contained in C can not be applied.

Applications for new or expanded minor surface water withdrawals. A new Section 9 VAC 25-210-80.C has been added to address the application requirements for new or expanded minor surface water withdrawals. These changes are a result of the incorporation of key concepts from the discussions of the WP5 TAC to create a streamlined process for this category of withdrawal.

Incomplete application. Section 9 VAC 25-210-80.F establishes a mechanism to administratively withdraw the application for failure to provide required information.

Conditions applicable to new or expanded minor surface water withdrawals. A new Section 9 VAC 25-210-110.A.3 has been added to incorporate key concepts from the WP5 TAC deliberations to create a streamlined process and applicable standards for minor surface water withdrawals.

Final compensatory mitigation plan. A new section 9 VAC 25-210-116.F has been added to clarify the specific information requirements for the final compensatory mitigation plans for wetlands (9 VAC 25-210-116.F.1) and streams (9 VAC 25-210-116.F.2). These amendments were added to clarify that the final compensation plan is a condition of the permit not a condition for the application to be deemed complete and to establish the time period allowed for submittal of the proof of recordation.

Administrative Changes. Numerous administrative and editorial changes have been made throughout the regulation. There have been a number of changes to the wetland general permits that resulted in changes in definitions, terminology, language, and application filing requirements. These changes in the general permit regulation became effective on January 26, 2005. The proposed amendments incorporate these changes into this regulation. In addition, a number of organization changes were made to consolidate sections for clarity. In these cases, language was generally transferred in verbatim form. The incorporation of key concepts and language from the Minor Water Withdrawal Technical Advisory Committee discussions on the development of a general permit for minor surface water withdrawals has also created the need to renumber and reorganize sections of the regulation. Changes have been made to clarify the regulation and improve the sequence of the regulation requirements.

PUBLIC COMMENT ISSUES

62 comments were received in response to the publication of the draft amendments as previously authorized by the Board. These comments and staff responses are included in the *Summary and Response to Public Comment on the Virginia Water Protection Permit Regulation, September 2006*. The NOIRA outlined the need to discuss the institution of a more formalized pre-application scoping process which could include opportunities for public involvement. Two concerns regarding this proposed approach were raised during this process: 1) that the purpose of any proposed scoping meeting should be clear and any ambiguity as to whether the meeting is “informational” or intended to “define information required of the applicant” should be avoided; 2) that the U.S. Army Corps of Engineers conducts a scoping process for projects needing NEPA review and coordination with this process is recommended to avoid overlap and unnecessary expense. Staff believes that the proposed amendments are consistent with this comment. The NOIRA also identified a need to clarify what is meant by cumulative impacts for water supply projects and how they will be evaluated. Commenters also advised that in order to be useful, any new language ought to establish criteria that put the impacts in context with regard to the project benefits and ought to clarify what levels of use are acceptable to DEQ. At this time, staff believes that DEQ lacks sufficient statewide information on the needs of specific beneficial uses to establish broadly applicable standards but agree that establishing the kind of regulatory framework envisioned by the commenter is a worthy goal.

A total of 150 comments made individually or by multiple commenters were received during the comment period for the General Permit for Minor Surface Water Withdrawals. Attempts by staff to address the numerous concerns raised by commenters during this rulemaking process and attempts to develop language to address every level of exclusion and every specific type of withdrawal situation in the general permit resulted in an unworkable general permit. Agency staff and administration concluded that the appropriate action is to withdraw the proposed general permit regulation and to incorporate the key concepts regarding minor surface water withdrawals into the VWPP regulation. Note that due to this decision, development of responses to comments was terminated.

Staff worked with the key concepts and language from the WP5 TAC discussions and developed an additional set of amendments to the VWP Regulation. These amendments are predicated on the assumption that different application requirements are appropriate for major and minor surface water withdrawals. The proposed amendments include exclusions of certain activities from permitting requirements, reporting requirements to maintain certain exclusions, applicable standards for minor surface water withdrawals, and a streamlined application process for new or expanded minor surface water withdrawals. The proposed amendment additions, contained in the *Proposed Revisions to the VWPP Program Regulation to Incorporate The Main Concepts and Key Issues Originally Proposed for Inclusion in the General Permit for Minor Surface Water Withdrawals, October 2006*, were reviewed by members of both the VWP TAC and the WP5 TAC and by a number of Interested Parties. A total of 17 comments were received on the proposed changes. (Comments and Responses are included in the *VWP-WP5 Incorporation – Comments Received Prior to Joint TAC Meeting – Thursday, October 26, 2006*.) A Joint Technical Advisory Committee Meeting of both the VWP TAC and the WP5 TAC was held on Thursday, October 26, 2006 to discuss these proposed amendments. (Notes/Minutes from that meeting are included in the *VWPP – Water Supply Permitting Work Group TAC/WP5 – General Permit for Minor Surface Water Withdrawal TAC – Joint Meeting, November 2006*.) Several additional changes have been made as a result of the deliberations of the Joint TACs (See *VWP-WP5 Modifications – Based on Joint TAC Discussions/Comments – November 2006*.) and are included as part of the proposed amendments. Using materials originally developed for inclusion in the General Permit regulation, staff will develop guidance for the implementation of the minor surface water withdrawal components of these amendments. (See *Guidance: Construction or Operation of Minor Surface Water Withdrawals and Limits on Minor Surface Water Withdrawals – DRAFT.)* In order to streamline the application process for Minor Surface Water Withdrawals, staff is also developing a streamlined joint application form with VMRC. (See *DEQ Permit Application for New or Expanded Minor Surface Water Withdrawals - DRAFT*.)

OTHER SIGNFICANT ISSUES

DEQ staff believes that once the total amount of excluded water use is known and DEQ considers these excluded amounts in cumulative impact analyses, some river basins will be near their capacity to meet the necessary demands of all existing beneficial uses during times of low flow. If some river basins are at or near capacity, a number of important regulatory and policy decisions will need to be made. In the short term, applicants may move toward off-stream impoundments that rely on pumping during higher than normal flows to meet their needs. The VWP TAC has expressed interest in continuing to work with DEQ and others to collectively improve our tools to manage this situation. However, there is a reasonable likelihood that resolution of this issue will become a legislative matter sometime in the future.

Additional work is needed to address consumptive uses in the Potomac River basin to assure a similar level of implementation in Virginia as compared to the efforts currently undertaken by Maryland to protect the water supplies in metropolitan Washington during low flow periods. Over the years, a complex arrangement of flow augmentation responsibilities has developed based in part on the level of consumptive use by individual withdrawals. The political and technical issues associated with implementing a basin-wide program comparable to that implemented by Maryland were too great to manage during the consensus process for these amendments.

A concern over the existing fee structure available for the proposed Minor Surface Water Withdrawal Permit was raised during the joint meeting of the VWP TAC and the WP5 TAC. In anticipation of the development of a General Permit for Minor Surface Water Withdrawals, the Board had set the fee for such a general water withdrawal permit at $2,400. Since the minor water withdrawal general permit did not proceed, an individual permit for New or Expanded Minor Surface Water Withdrawals would not be eligible under the general permit category and the existing permit fee regulation (9 VAC 25-20-10 et seq.) would set the fee for this type of permit in the 15 to 25 thousand dollar range. Additional work will need to be done to evaluate the review

requirements for permits for new or expanded minor surface water withdrawals to determine an appropriate fee level for consideration when the Fee Regulation is revisited.
The Fairfax County Water Authority raised a question regarding the potential impact of the proposed amendments on their existing on-shore and off-shore intakes on the Potomac River and provided suggested revisions. These comments were received after the close of the comment period for this regulatory action. Staff has evaluated these comments and suggestion and has made a determination that, provided that the information regarding the capacity of the on-shore intake that has been presented is correct, withdrawals of up to 400 MGD by FCWA will be excluded from permitting requirements whether it is withdrawn from the on-shore or off-shore intake. A letter providing this interpretation has been presented to the attorney representing FCWA. FCWA has given staff verbal assurances that our interpretation addresses their concerns.

Issuance of VWP Permit No. 04-0761, The Galleria, Chesterfield County: At the December 14, 2006 meeting, the Board will be asked to reconsider their September 6, 2006 decision regarding the Virginia Water Protection (VWP) Permit 04-0761 to HMK L.L.C. for The Galleria Development. Below is the text of the September memo updated to include the response to public comments received and to include the modification of the permit to address the on-site mitigation change.

The proposed project is a mixed-use development called The Galleria. It includes a roadway, known as Boulders Parkway Extension, which bisects the wetlands and provides access to the main portion of the development (Tract I). The development also includes construction of road crossings, parking lots, residential or commercial buildings, and associated infrastructure on a 165-acre site. Overall, the site contains approximately 27 acres of high quality wetlands and 9,479 feet of stream channel. Water quality impacts are expected to be temporary and minimal provided the permittee abides by the conditions of the permit.

The proposed permit was drafted in accordance with the VWP Permit Regulation (9 VAC 25-210-10 *et seq*.). It authorizes permanent impacts to no more than 1.79 acres of emergent wetlands, 1.74 acres of forested wetlands, 1950 linear feet of intermittent stream channel and 76 linear feet of perennial stream channel affecting portions of Powhite Creek, Long Branch Creek, and associated unnamed tributaries.

To compensate for the wetland impacts, the applicant will purchase available credits at the Virginia Habitats II Mitigation Bank in Charles City County, Virginia. Impacts will be compensated at ratios of 2.5:1 for permanent forested wetland impacts (4.48 acres debited) and 2:1 for permanent emergent wetland impacts (3.48 acres debited). These compensatory mitigation ratios for wetland impacts are higher than normal. Guidance Memorandum 00-2003 provides for assessing greater mitigation ratios when a wetland is high quality or the permittee is mitigating offsite. In this case the applicant agreed to the higher than normal ratios due to the higher habitat quality provided by the wetlands being impacted.

The draft permit issued to the applicant required stream channel compensation through the restoration of stream channel at the Midlothian Coal Mine Park in Chesterfield County, Virginia. As a result of public comment regarding the distant location of mitigation, stream restoration opportunities were found onsite along Long Branch Creek and its tributaries within Tract I of the project. The main section of Long Branch Creek and its tributaries, from Lake Page in Crestwood Farms to Powhite Parkway is incised, and has eroded banks along much of the channel, causing large amounts of sediment from both the streambed and stream banks to be deposited downstream. In terms of the requirements of VWP regulations 9VAC 25-210-115.D.2, this onsite stream restoration option appears to be practicable and ecologically preferable to the Coal Mine. Long Branch Creek is also a tributary of Powhite Creek, which is listed on DEQ's 2004 §303(d) impaired water list.

DEQ recommends changing the required stream compensation in the draft permit from restoration at the Coal Mine Site to the stream channels onsite. The draft permit has been changed to require that the applicant submit a new compensation plan for stream impacts that looks specifically at restoring Long Branch Creek and its onsite tributaries from the dam at Lake Page downstream to Powhite Creek. The permit is written to allow the permittee to utilize the Coal Mine Site if the conceptual planning and engineering determines that onsite restoration is not feasible, as determined by DEQ. If sufficient stream compensation is not available after conducting a DEQ approved stream assessment, then the permittee is required to purchase credits at an approved mitigation bank to satisfy the remaining balance of stream compensation. The permit does not require any protective instruments for the proposed stream restoration areas because a 100-foot Riparian Protection Area buffer currently exists along Long Branch Creek.
Public Notice: The draft permit was public noticed in the Richmond Times Dispatch on March 8, 2006 for a 30-day public comment period that ended on April 7, 2006. During the comment period, 48 letters or emails were

received from the public, representing 67 individuals. A letter was also received from the Crestwood Farms Residence Association. Five letters were also received the next business day after the close of the public notice. All of the comments expressed concerns or opposition to the project as proposed. Forty six of the comments received included a request that the State Water Control Board hold a public hearing regarding the issuance of the permit.

Issues raised include:

- Concern about the overall effect of the project on water quality, fish and wildlife, plants, and the impact to high quality wetlands and stream channels.
- Concern that the wetland and stream compensation required in the draft permit was not in close proximity to the site of the project and would not mitigate the local effects of the loss of wetlands and streams.
- Concerns about the type of development proposed for the site, its affect on the community, increased traffic and noise, as well as the public benefits of the project.
- Concern that the permit application does not show the complete development plans for this site and consequently does not allow an adequate evaluation of wetland impacts.

Staff Comments: When reviewing an application, the primary focus of the VWPP Program is to assure that impacts to wetlands and other State waters are avoided and minimized to the maximum extent practicable. Unavoidable impacts must then be compensated to assure no net loss of wetland function and acreage.

Since submittal of this application over two years ago, staff has worked diligently with the applicant to ensure that the above-discussed requirements are met. As such, the project plans have gone through numerous revisions to provide additional avoidance and minimization. A detailed discussion of the avoidance and minimization evaluated will be provided in a separate memo. These plan revisions resulted in the following changes:

- The applicant reduced stream impacts by 1,428 linear feet of impacts. Wetland impacts were also reduced by a total of 0.67 acre.
- The applicant redesigned the project to provide a minimum of 25-foot buffers along each side of the stream channels remaining within the commercial area to minimize secondary impacts. 3,613 linear feet of stream channels have been placed within these buffer areas. The permit does not require the permanent protection of these buffers though protective instruments, such as easements or deed restrictions.

The project qualifies for an individual permit from the U.S. Army Corps of Engineers (COE), who have withdrawn the application due to the lack of response from the applicant. The COE received 29 letters of opposition when they notified the adjacent landowners of the proposed project. Chesterfield County initially opposed the project in a letter to the COE dated September 13, 2004. However, the County later retracted its opposition in a letter to the COE dated May 16, 2005.

In a letter to the COE dated September 30, 2004, the U.S. Fish and Wildlife Service (USFWS) indicated that no impacts to federal listed or proposed species or designated critical habitat would occur from the project. However, the USFWS expressed concern regarding the amount of impacts resulting from the construction of the Boulders Parkway Extension and requested that the applicant pursue additional avoidance and minimization. In addition, the USFWS stated that a great blue heron (*Ardea herodias*) nest had been documented on site, which is also indicated in the application. This species is protected under the Migratory Bird Treaty Act. However, a subsequent October 25, 2005 e-mail from staff of the Virginia DGIF noted that the DGIF records did not reflect this observation but they recommended a time of year restriction and buffer on a Blue Heron nest if it existed on the site. During the processing of the application, the Blue Heron nest was no longer found on the site and is believed to have been lost as a result of Hurricane Isabel. In further correspondence with DGIF, they stated that while only this one likely great blue heron nest was observed by the consultant, the site has the potential to support a nesting colony. This potential is increased due to the condition of the wetlands and surrounding forest that currently exist along Powhite Creek. They did not recommend surveys for additional Blue Herons or other rare species. Because of public comment, the applicant provided information to DEQ on June 20, 2006 stating they had been on the site many times and there is presently no evidence of a nest.

In a letter to the COE dated October 1, 2004, the U.S. Environmental Protection Agency (EPA) stated that almost the entire impact of the proposal is a result of the construction of the road crossing. EPA believes that the impacts resulting from the construction of Boulders Parkway Extension could be avoided and that

sufficient rationale had not been provided to justify connecting the two Tracts by a new road, instead of using additional flyovers from the existing ramp system, or adding a dedicated lane(s) to the exiting Chippenham Parkway and bridge, or by utilizing the existing road network and developing the two project Tracts as separate parcels. EPA indicated its opinion that "…the proposed project may result in unnecessary substantial and unacceptable impacts to Aquatic Resources of National Importance", and that it would elevate the permit decision as outlined in Section 404(q) of the Clean Water Act if the COE were to issue the permit as proposed.

The Piedmont Regional Director granted the request for public hearing, and a Notice of the Public Hearing and comment period was published in Richmond-Times Dispatch on May 27, 2006. Copies of the notification of the location, date, and time of the public hearing were sent to all of the concerned entities.

Mr. Shelton Miles officiated the public hearing, which was held at 7:30 p.m. on June 28, 2006, at Crestwood Elementary School in Chesterfield County, Virginia. 114 individuals signed in at the public hearing and 28 individuals spoke.

The public comment period in response to the Notice of Public Hearing began on May 27, 2006, and closed on July 13, 2006. Twelve additional comments letters were received during the public notice period for the hearing, including one from the applicant.

A summary of the written and verbal comments received during the draft permit public notice, public hearing and subsequent comment period, are available, along with a summary of major issues and staff response to these issues.

The Board considered the draft permit at their September 6, 2006 Board meeting where it decided not to approve the staff recommendation to authorize issuance of the permit.

For the additional material on Galleria that was included in the minibook for the September 6, 2006, meeting go to:
http://www.townhall.virginia.gov/Utils/DisplayContent.cfm?fileName=E%3A%5Ctownhall%5Cdocroot%5Cmeeting%5C7738%5Cagenda%5Fdeq%5F7738%5Fv2%2Epdf

Reissuance of VPDES Permit No. VA0002178 Merck & Co., Inc.-Stonewall Plant, Rockingham County: The purpose of this agenda item is to determine the appropriate action regarding the reissuance of VPDES Permit No. VA0002178. Merck & Co., Inc. has applied for reissuance of a permit to discharge various wastewaters from a pharmaceutical manufacturing plant located near Elkton, Virginia. The permit application was submitted on August 1, 2003 for the reissuance of this permit. The application was deemed complete on September 4, 2003. Processing of the reissuance request was delayed while waiting for final approval of the nutrient wasteload allocations that will be applied to this discharge. Those allocations were approved in September 2005 as an amendment to the Water Quality Management Planning regulation. During this delay, the permit was administratively continued past its expiration date. Public notice of the proposed permit reissuance was published in the Daily News Record on May 11, 2006 and May 18, 2006. During the public comment period of the draft permit, the agency received requests from five citizens that a public hearing be held. Public notice for the hearing was published in the Daily News Record on August 29, 2006 and September 5, 2006.

A public hearing was held on October 3, 2006, with 17 citizens in attendance. Mr. Shelton Miles III served as the hearing officer. Seven attendees provided oral comments. Six of those commenting expressed concern with the draft permit and the state of the river. Following the public hearing through the close of the hearing record on Wednesday, October 18, 2006, the agency received one e-mail providing additional comments in response to the permittee's hearing presentation. Summary of Public Comments and Agency Response to Comments: The comments in opposition to the draft permit that were received up to the date of the hearing may be summarized into the following categories:

1. That the request by the permittee for a 301(g) variance from the Best Available Technology Economically Achievable (BAT) limits for Ammonia-Nitrogen listed in the Federal Effluent Guideline Limitations for Pharmaceutical Manufacturers (FEGL) should not be approved;
2. That the 1985 decision to relax the Total Suspended Solids (TSS) limitations should be re-examined and reversed;
3. That the use of the 1.2 million gallons per day (MGD) design flow at internal outfall 101 in the calculation of the mass/loading limitations for the parameters listed in the Federal Effluent Guideline Limitations for Pharmaceutical Manufacturers (FEGL) is believed to be incorrect;

4. That sampling for the parameters listed in Attachment A of the draft permit should be done before the permit can be reissued, and that there should be a permit condition that will require information on pharmaceutical compounds and intermediates in this plant's wastewater;
5. That the request by the permittee for a reduction in monitoring frequency from multiple times each week to once per week should not be allowed for 5-Day Biological Oxygen Demand (BOD_5), Total Suspended Solids (TSS), Chemical Oxygen Demand (COD), Total Kjeldahl Nitrogen (TKN), Ammonia-Nitrogen (NH3-N), and Cyanide;
6. That the application for reissuance of the permit was filed late by the permittee; and
7. That instances of noncompliance by Merck were not considered by DEQ in preparing the effluent limits for the facility.

These comments were acknowledged by the staff during the hearing, and these concerns were also discussed with a number of the citizens prior to and following the hearing. The staff's detailed responses to these comments are provided below.

Public Comment: The request by the permittee for a 301(g) variance from the Best Available Technology Economically Achievable (BAT) limits for Ammonia-Nitrogen listed in the Federal Effluent Guideline Limitations for Pharmaceutical Manufacturers (FEGL) should not be approved.

DEQ Response: Merck notified DEQ on June 30, 2006, that they were withdrawing their request for the 301(g) variance. This information was conveyed to the concerned party on the same day it was received. We will use the limitations for Ammonia-N that are listed in the Federal Effluent Guideline Limitations (FEGL) for Pharmaceutical Manufacturers and convert them to mass loading limitations for the permit, as specified in the Technical Development Document (TDD) for the FEGL. These limits will be applied at the new internal outfall (#101).

Public Comment: The 1985 decision to relax the Total Suspended Solids (TSS) limitations should be re-examined and reversed.

DEQ Response: The background section in the Fact Sheet under the Total Suspended Solids (TSS) parameter states that there was a relaxation of the TSS limits in 1985 and that it was not considered backsliding, because the 'permittee had experienced compliance problems with the earlier limits'. In addition, there was new information that was not previously available, and had it been available, would have resulted in the different limits. While it is difficult to know exactly what regulations were in place over 20 years ago and what the exact interpretation was at the time, this would be permissible based on the current VPDES Regulation (9 VAC 25-31-220.L.2.). The approach we have used in developing the TSS limitations is consistent with the approach outlined by EPA in the Federal Effluent Guideline Limitations (FEGL) for Pharmaceutical Manufacturers. However, the limits we are proposing to carry forward are significantly more stringent than what would be required by the FEGL.

Our application of Agency guidance (GM 04-2020) is actually considered to be an adjustment to the limits, and is not to be construed as backsliding. The limits set in 1985, and subsequent permit reissuances, were based on information that was available at that time and are considered to be case-decisions. Consequently, those limits remain legally acceptable. The limits in the current permit are based on application of Best Professional Judgment and are the most restrictive of various methods of calculating the limits under current regulations.

Public Comment: The use of the 1.2 million gallons per day (MGD) design flow at internal outfall 101 in the calculation of the mass/loading limitations for the parameters listed in the Federal Effluent Guideline Limitations (FEGL) for Pharmaceutical Manufacturers is believed to be incorrect.

DEQ Response: The Technical Development Document (TDD) for the Pharmaceutical FEGL states the limitations will be mass-based values based on the concentrations prescribed in the FEGL. In addition, the FEGL allows the use of up to 25% non-process flow in the calculation of mass-based limitations. The sanitary wastewater and powerhouse water are considered non-process flow and comprise less than 25% of the total flow at internal Outfall 101. The filter press water must be included as process water, because it is a "byproduct, or waste product" that comes from sludge generated in the treatment of the production wastewater and cleaning of the filter press (40 CFR 122.2). Sludge from the sanitary treatment is pumped and hauled to a local municipal treatment facility for additional treatment, and is not processed in the filter press equipment at the subject facility. These are the sources of flow that pass through Outfall 101. DEQ is moving towards defining the design flow for industrial facilities (where possible), so that we have less change in the effluent limitations between permit cycles due to changes in production levels at the facility. The use of the 1.2 MGD design flow in the

Merck permit is the first time this number appeared in their permit, and will result in very little change in the effluent limitations at the internal outfall between this permit reissuance and the next (unless there are changes in FEGL, etc.). This stability in the discharge flow number helps us regulate facilities more equitably and helps remove some inconsistencies in how various water program initiatives are implemented.

Unfortunately, the language in the TDD differs depending on what section is referenced. Some sections state that an annual average flow should be used in the calculation, while other sections state that a "reasonable estimate" of the flow should be used in the determination of the mass-based limitations from the concentrations listed in the FEGL. DEQ has decided to use a "design flow" number to eliminate the year-to-year variability that would occur from using any other measure. We consider the design flow to be equal to the annual average flow that would be experienced under optimal economic conditions for the industry. This is how we would establish effluent limits for a proposed industry, and it protects the wasteload allocations granted to an existing industry if the economy has not allowed operating at optimal levels. DEQ is avoiding making revisions to effluent limits for industrial facilities once they are set, unless there have actually been changes in the facilities, regulations, or stream data that would necessitate such revisions. In addition, a definitive flow value is required in setting parameter limits and loading values used in other DEQ programs (e.g., TMDL, Chesapeake Bay Program, Air). The annual average flow is not stable enough for these purposes, and the use of the design flow is the best approach for all of our programs that have regulatory oversight at this facility. We have also included in this permit, for the first time, the 95% flow capacity criteria based on 9 VAC 25-31-200.B.4. (Part I.F.1. of the permit). Although this regulation specifically refers to sewage facilities, we believe it is appropriate to ensure that actions are taken by industrial facilities should their flows consistently exceed 95% of the design flow.

Public Comment: Sampling for the parameters listed in Attachment A of the draft permit should be done before the permit can be reissued, and there should be a permit condition that will require information on pharmaceutical compounds and intermediates in this plant's wastewater.

DEQ Response: Part I.F.8. of the permit requires monitoring for several parameters within one year from the permit's effective date. Attachment A will be used for reporting these parameters. The parameters that are being required by Attachment A were not included in the Virginia Water Quality Standards (WQS) when the permit was last reissued in 1999, and therefore there was no basis for evaluation. There is some overlap in the list of parameters between EPA Application Form 2C and the current Virginia WQS. Parameters that are included on both Form 2C and in the Virginia WQS were evaluated during this permit reissuance. The parameters that are not listed on Form 2C, but are now required by the Virginia WQS, are included in Attachment A. The Agency's VPDES Permit Manual prescribes the use of Attachment A, and defines when this additional information should be submitted. We selected the shortest prescribed time period for compliance with this requirement (i.e., within one year from permit reissuance). The additional data will be reviewed upon receipt to assure protection of downstream water quality. The permit is our regulatory tool for getting the additional information we need.

With regards to the collection of information on pharmaceutical compounds and intermediates in this plant's wastewater, we are following current regulations and guidance regarding this type of industry. At present, there is no EPA or DEQ guidance that requires the collection of this information. If there were additional EPA or DEQ guidance identifying additional compounds that should be monitored, and against what criteria they should be evaluated, we would include the additional monitoring requirements in the draft permit. We have forwarded this concern to our Central Office staff for their further evaluation.

Public Comment: The request by the permittee for a reduction in monitoring frequency from multiple times each week to once per week should not be allowed for 5-Day Biological Oxygen Demand (BOD5), Total Suspended Solids (TSS), Chemical Oxygen Demand (COD), Total Kjeldahl Nitrogen (TKN), Ammonia-Nitrogen (NH3-N), and Cyanide.

DEQ Response: Merck requested, and we granted, reduced monitoring for BOD5, TSS, COD, TKN, NH3-N, and Cyanide based on a record of past compliance. We used DEQ's reduced monitoring policy to set the monitoring frequencies for these parameters. Monitoring frequency is not specified by the regulation; it is set by guidance and the VPDES Permit Manual. In the example for Ammonia-N, the previous permit listed the frequency of monitoring as once per day. Based on a review of the data, and comparing it with the monitoring frequency reductions table in the VPDES Permit Manual, we set the monitoring frequency at once per week (1/WK) for this parameter. We believe that using a frequency of monitoring for Ammonia-N that is equivalent to the frequency of monitoring for the nutrient parameters required by the DEQ Chesapeake Bay Program is appropriate for this permit. The ratio of long-term average to the monthly average limit for all six of the aforementioned parameters was less than 25%, as described in the Fact Sheet under the respective sections for

each parameter. We believe that the frequency of analysis for these parameters, as set forth in this permit, is adequate to reasonably assess the permittee's performance and to effectively evaluate their potential impact on the receiving stream. The VPDES Permit Manual actually recommends a monitoring frequency of once per month (1/M) for parameters at industrial facilities. A sampling frequency that is more or less stringent may be used, as long as a rationale for the deviation(s) is provided in the Fact Sheet. All of the parameters mentioned in the public comment above have been set to a frequency of once per week (1/WK) in the proposed permit.

Public Comment: The application for reissuance of the permit was filed late by the permittee.

DEQ Response: The deadline for submittal of the VPDES permit application for the subject facility was August 4, 2003. The permittee submitted a complete application on August 1, 2003. Therefore, the application was not filed late. During the course of permit development, there are often unforeseen events (e.g., development of statewide nutrient limitations, etc.) that require us to request additional information from the permittee. The date we receive such submittals of additional information is registered for our own record-keeping purposes. The first page of the Fact Sheet identified this later date and not the actual application submittal date, which may have led to the confusion. An additional line item has been added to the front page of the Fact Sheet for clarification so that both dates are evident.

Public Comment: There have been instances of noncompliance by Merck, which were not considered by DEQ in preparing the effluent limits for the facility.

DEQ Response: This is partially in reference to an issue regarding Discharge Monitoring Report (DMR) discrepancies that were recognized by the public after completing a file review for the subject facility. The discrepancies had already been identified by a DEQ review of several years of files and noted in the Compliance files prior to review by the public. Our review of the files was based on a search for possible causes of a fish kill in the South Fork Shenandoah River that occurred in the spring of 2005. In fact, every facility in the area was heavily scrutinized for a possible link to the situation. The notes DEQ had attached to the DMRs in the file for the months March 2005 and April 2005 indicated that a discrepancy was found between the maximum daily concentration for Ammonia-N as reported on the DMR and what was indicated in the raw data on the attached daily log form. Merck was contacted for an explanation of the situation. What may not have been obvious when the public reviewed the file, since it is arranged chronologically, is that Merck submitted a letter of explanation dated August 18, 2005. This explanation included revised DMRs. Merck stated that they had mistakenly reported the maximum daily mass value on the original DMR in place of the maximum daily concentration on these two occasions. They confirmed that the daily log reports were correct in both cases. The revised DMRs have since been placed directly with their respective original DMRs in the file, so the situation is clearer to anyone else that may review the file.

This comment is also in regards to the public's opinion that Merck should have met the Pharmaceutical FEGL by September 2001, regardless of whether the limits were contained in their VPDES permit. The regulation states that, "The compliance date for PSES [Pretreatment Standards for Existing Sources] is as soon as possible, but no later than September 21, 2001. The compliance dates for NSPS [New Source Performance Standards] and PSNS [Pretreatment Standards for New Sources] are the dates the new source commences discharging. Deadlines for compliance with BPT, BCT, and BAT are established in the National Pollutant Discharge Elimination System (NPDES) permits" [From the Federal Register, Vol. 63 No. 182, Monday, September 21, 1998 (pg. 50388-50389)]. The Merck-Stonewall Plant does not "Pretreat" their wastewater and send it to a Publicly Owned Treatment Works (POTW) for further treatment, and they are not a "New Source." Therefore, the PSES deadline of September 21, 2001, and the NSPS and PSNS criteria do not apply. Accordingly, compliance needs to be set by the NPDES permit for the facility. Since there is no reason to believe that Merck cannot meet these new Pharmaceutical FEGL upon permit reissuance, no compliance schedule is necessary for these new limits. Merck will need to comply with the Pharmaceutical FEGL as soon as the permit is signed.

Many of the additional comments received during the public hearing and through October 18, 2006, when the hearing record closed, can be consolidated into one of the comments acknowledged during the hearing presentation by DEQ staff.

Presented below is a summary of the additional comments and information received at the public hearing and prior to the close of the hearing record, and the staff's detailed responses:

Permittee's Comment: Merck has invested a significant amount of effort to evaluate the feasibility of the nutrient limits that are reflected in the draft VPDES permit, 9 VAC 25-720, and the new Watershed General Permit for Nutrients. Merck does not believe it can achieve the nutrient removal technology required to meet the

proposed limits at any level of effort. We would like DEQ to modify the nutrient limits that are currently on record for the Stonewall plant, and will be petitioning the State Water Control Board for adjustments to its current allocations.

DEQ Response: We have removed these nutrient limits and conditions from the draft individual permit, because they have been superseded by the limitations and conditions contained within the new *General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia* (9 VAC 25-820-10 et seq.) and the *Water Quality Management Planning Regulation* (9 VAC 25-720-10 et seq.). The facility is required by law to apply for the General Permit by January 1, 2007.

We have notified Merck of the mechanism by which they can formally petition the SWCB for a change in the nutrient allocations that are contained within the Water Quality Management Planning Regulation.

Public Comment: Converting the concentration values listed in the Pharmaceutical FEGL to mass loading limitations should be done by using the actual average daily flow or expected actual flow, if the actual flow is known to be changing, instead of the design flow for the facility according to new EPA Guidance [*Permit Guidance Document: Pharmaceutical Manufacturing Point Source Category (40 CFR Part 439)*, EPA 821-F-05-006, U.S. Environmental Protection Agency, Office of Water, Engineering and Analysis Division, Section 8.2, January 2006].

DEQ Response: A review of this new guidance from EPA suggests that DEQ's approach to development of the mass-based permit limitations is still appropriate. The guidance states that, "Mass limitations for unregulated process wastewater streams and dilution streams at direct discharging facilities are established by the NPDES permit authority using best professional judgment (BPJ)" [Section 8.2, pg. 8-3]. This guidance recommends the use of the facility's long-term average flow, provided that the non-process wastewater is no more than 25% of the total flow. The wastewater composition has been evaluated in regards to the percentages of process and non-process flow. "However, permit writers have flexibility when determining a facility's long-term average flow rate. If a facility is expecting significant changes in production as represented by previous year(s) data, permit writers may establish a flow rate expected to be representative during the permit term" [Section 8.2.1, pg.8-4].

Using BPJ, staff have established that the theoretical design flow of the facility is a representative flow rate, because industrial facilities are often designed around a different parameter than flow volume (e.g., influent COD concentration) to better match production capacity. Therefore, it is not uncommon for industrial facilities to experience discharge flows higher than the design flow due to changes in production, and still have the ability to effectively treat the wastewater. Because of this, we believe the design flow is equivalent to the long-term average flow that would be experienced under optimal economic conditions for the industry which could occur during the term of the permit. This is how we would establish effluent limits for a proposed industry, and we do not believe it is appropriate to penalize an existing industry if the economy has not allowed operating at optimal levels or if production levels are known to fluctuate during the permit term. The referenced EPA guidance supports this position for new dischargers by stating that, "…permit writers should establish a reasonable estimate of the facility's projected flow" [Section 8.2.1, pg.8-5]. For a new discharger, there is no better "reasonable estimate" of flow than the design flow. Therefore, the most equitable and consistent approach in setting limits is to use the same flow for existing dischargers as we would use for new dischargers.

Finally, the EPA guidance does not require the use of the long-term average flow when setting the limits. It states that, "For NPDES permits, after determining the facility's long-term average process wastewater flow, permit writers can use the long-term average daily flow rate or other established flow rate to convert concentration-based limitations into mass-based limitations" [Section 8.2.2, pg.8-5]. We believe the design flow is the most appropriate value to use in this situation.

Public Comment: The monitoring frequency for certain pollutants is being relaxed from daily to weekly. Monitoring is our best means of detecting a problem, and why, after 20 years of daily monitoring, have we chosen to allow a reduction now? An example is a problem that occurred at the Merck-Westpoint plant near Philadelphia, Pennsylvania in June 2006. Had monitoring been more frequent for the Cyanide parameter, a problem that led to a fish kill may have been detected sooner. Merck is being permitted to discharge over 8 million gallons per day into the Shenandoah River System, and it is inconceivable that such a large and complex source of wastewater would only be monitored once per week for BOD, ammonia, and cyanide, especially considering that citizens of Luray, Front Royal, and Berryville derive their drinking water from the South Fork Shenandoah River.

DEQ Response: To clarify, the volume of flow being discharged from the treatment of production and sanitary wastewaters is approximately 1.2 million gallons per day (MGD). The remaining volume of flow is predominantly from non-contact cooling water and storm water. The assessment of potential impacts to a Public Water Supply (PWS) falls under the jurisdiction of the Virginia Department of Health (VDH). VDH has reviewed the application and did not have any objections to the discharge.

The draft permit proposes a reduction in monitoring frequency for BOD5, TSS, COD, TKN, and Ammonia-N from once per day (1/Day) to once per week (1/Week). The proposed reduction in monitoring frequency for Cyanide is from three times per week (3/Week) to once per week (1/Week). These proposed reductions are based on a review of three years of Discharge Monitoring Report (DMR) data for the respective parameters. This evaluation compares the ratio of the 3-year composite average for the effluent data of each parameter to the respective Monthly Average Limit. The frequency of monitoring can be adjusted from a baseline frequency to a reduced frequency, depending on the resulting ratio. The baseline frequency and several ranges of ratios are presented in a table in DEQ's VPDES Permit Manual, along with the procedure for such reductions.

The problem at the Merck-Westpoint plant near Philadelphia, Pennsylvania in June 2006 was believed to be the result of a release of about 25 gallons of potassium thiocyanate into the sewer system. This facility is not a direct discharger, but pretreats its wastewater and sends it to the Upper Gwynedd Township Wastewater Treatment Plant for further treatment. The belief by Pennsylvania environmental officials is that the chemical combined with chlorine at the sewage-treatment plant and became more toxic to fish than the original chemical. It is speculated that had the facility been required to monitor their wastewater more frequently than once per week for Total Cyanide, the problem may have been discovered earlier. However, this is not a certainty.

Total Cyanide is sampled and limited in the Merck-Elkton permit due to its use in production. Merck-Elkton uses a chlorine/oxidation-based Cyanide destruction system to treat their Cyanide. This method of disposal is apparently one of the most established chemical methods for the treatment of cyanide wastes [Saarela K & Kuokkanen T (2004), *Alternative disposal methods for wastewater containing cyanide: Analytical studies on new electrolysis technology developed for total treatment of waste water containing gold or silver cyanide.* In: Pongrácz E (ed.) Proceedings of the Waste Minimization and Resources Use Optimization Conference, June 10th 2004, University of Oulu, Finland.

Oulu University Press: Oulu. pp. 107-121]. This same reference states that while the chlorine/oxidation-based Cyanide destruction process is effective, one of the major disadvantages "is the potential for forming chlorinated organics. Some of these substances (e.g. cyanogen (CN)2) are even more harmful and toxic than cyanide itself. Therefore, pH in the process must be controlled carefully."

Based on a 1993 stream model done by Law Environmental, the Cyanide limits in the Merck-Elkton permit are significantly more restrictive than the Federal Effluent Guideline Limitations for Pharmaceutical Manufacturers (FEGL). In addition, the Elkton facility has annual Toxics Management Program (TMP) monitoring, which they have passed. It has been our experience and belief that if a facility has been able to show a sustained level of compliance with the limitations, then they likely have taken appropriate measures to control both the average level of pollutants of concern in their discharge and the variability of such parameters in the discharge, regardless of any reductions in monitoring frequency that may be granted. In addition, should some unforeseen event occur that results in any unusual or extraordinary discharge from a treatment works that has the potential to enter State waters, the permittee must notify DEQ within 24 hours.

Public Comment: The permit should have a condition in it that requires the measurement and disclosure of the presence of any pharmaceuticals, pharmaceutical intermediates, and pharmaceutical by-products in the plant's wastewater. In addition, the permit should require Merck to report what, if any, effects these chemicals could have on the downriver drinking water supply, the aquatic ecosystem, and persons recreating in the river. We need to be better informed about such chemicals in light of the new evidence of intersex traits in Shenandoah River bass and the rash of spring fish kills. The latest theories about the fish kills are beginning to incorporate the effects of endocrine disrupting and estrogen masking chemicals in our system as they relate to pharmaceutical residues that are being passed through our wastewater treatment facilities, and potentially from a pharmaceutical manufacturing plant, as well as from agricultural runoff.

DEQ Response: The staff shares the public's concerns regarding pharmaceuticals, pharmaceutical intermediates, and pharmaceutical by-products. DEQ is tracking this emerging issue in our water quality standards and biological programs, and our monitoring and assessment unit. However, unless the permittee is violating a specific water quality criterion or Federal Effluent Guideline Limitation, not passing the annual

Toxics Management Program (TMP) tests, or otherwise violating the general criteria in some way that can be documented, there currently is no regulatory basis or additional EPA guidance available for us to evaluate this type of information.

In regards to the intersex condition that is showing up in some fish within the river, it should be noted that the 'endocrine disrupting and estrogen masking chemicals' impact is a preliminary theory in the research that is being conducted by the Shenandoah River Fish Kill Task Force. In addition, the control stream that was included in the initial intersex fish study actually had a higher degree of intersex occurrences than some of the other streams in the study. This stream was chosen as a control due to its minimal impact from wastewater treatment facilities and manufacturing plants.

It is our understanding that Merck and the Shenandoah Riverkeeper met on October 17, 2006 to discuss this issue. At that meeting, Merck provided the Shenandoah Riverkeeper with a list of pharmaceutical intermediates and associated research they had done on the potential toxicity.

Public Comment: In light of Merck's comment at the hearing that they will be seeking a change in the facility's nutrient allocation(s), we want to go on record with the following statement: Nutrient reductions are critical to the health of the river and the Bay. The state nutrient reduction program goals will not be met easily and the state should proceed cautiously in any instance where an individual discharger is claiming the inability to comply and seeks an increased allocation. We wish to be informed of any request by Merck for an increase in its nutrient allocation.

DEQ Response: We have removed the nutrient limits and conditions from the draft individual permit, because they have been superseded by the limitations and conditions contained within the new *General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia* (9 VAC 25-820-10 et seq.) and the *Water Quality Management Planning Regulation* (9 VAC 25-720-10 et seq.). The facility is required by law to apply for the General Permit by January 1, 2007.

Any petition for a change in the nutrient allocations contained within the General VPDES Watershed Permit Regulation will be handled by our Richmond office. We have informed the appropriate DEQ staff member that the Shenandoah Riverkeeper would like to be informed if Merck submits a petition for an increase in the nutrient allocation. In addition, the contact information for this DEQ staff member has been provided to the Shenandoah Riverkeeper. Any proposed change to the current nutrient allocation will also be published in the Virginia Register, with a 21-day comment period after publication.

In summary, the staff believes that the proposed permit is protective of water quality, will result in no detrimental effects to the environment, and is written in full compliance with all applicable State and Federal regulations. The staff recommends that the Board authorize the reissuance of VPDES Permit No. VA0002178 as drafted.

Issuance of VPDES Permit No. VA0091987 Southern Pines Pollution Control Plant, Fluvanna County: The purpose of this agenda item is to determine the appropriate action regarding the issuance of VPDES Permit No. VA0091987.Southern Pines Investments, LLC, has applied for issuance of a permit to discharge treated wastewater from a treatment plant serving a proposed residential community consisting of 238 single-family homes. The permit application was first submitted on March 22, 2006, and it proposed discharging treated sewage wastewater from the facility to Phils Creek. Following the receipt of additional information on March 27, 2006, and June 26, 2006, the application was deemed complete. On July 31, 2006, a notification of application receipt was mailed to Fluvanna County government officials, the Thomas Jefferson Planning District Commission, and riparian landowners within one-half mile downstream of the proposed discharge point. Prior to public notice publication, the agency received: (1) one e-mail from a downstream riparian landowner; (2) one e-mail from a member of the Fluvanna County Board of Supervisors; (3) three e-mails and one letter from citizens; and (5) a petition signed by 4 citizens all objecting to the permit issuance. Public notice of the proposed permit issuance and a public hearing was published in the Central Virginian on September 14, 2006, and September 21, 2006. Following public notice publication and prior to the public hearing, the agency received: (1) three e-mails from a downstream riparian landowner; and (2) two e-mails from citizens all objecting to the permit issuance.

A public hearing was held on October, 17, 2006, with approximately 32 citizens in attendance. Mr. Shelton Miles III served as the hearing officer. Ten attendees provided oral comments. Nine of those commenting were opposed to the draft permit. Written comments from a downstream riparian landowner who was not in

attendance were also read. Following the public hearing through the close of the hearing record on Wednesday, November 1, 2006, the agency received: (1) three e-mails from citizens; (2) two e-mails submitting written copies of statements read at the public hearing; and (3) a petition signed by 159 citizens all opposed to the draft permit. Five of the citizens who signed the petition had previously submitted comments.

Summary of Public Comments and Agency Response to Comments: The comments in opposition to the draft permit that were received up to the date of the hearing may be summarized into the following categories:

1. That Phils Creek is a small stream that has dried up during summers in the past;
2. That Byrd Creek, which is downstream from the proposed discharge, is impaired for bacteria;
3. That Phils Creek immediately downstream of the proposed discharge point is used for recreation and other uses;
4. That other small creeks in Central Virginia similar to Phils Creek contain rare, threatened, or endangered species;
5. That there is a history of failures among small sewage treatment plants in Fluvanna County;
6. That there is minimal oversight of small sewage treatment plants by DEQ; and
7. Questions regarding the proposed facility's effect on the property value of the surrounding land.

These comments were identified as having been received by the staff during the hearing, and these concerns were also discussed with a number of the citizens prior to and following the hearing.

The staff's detailed responses to these comments are provided below.

Public Comment: Phils Creek is a small stream that has dried up during summers in the past.

DEQ Response

For the purposes of drafting the subject permit, the Phils Creek segment proposed to receive the discharge was deemed to be a Tier 2 water, meaning that its quality is better than required by the Water Quality Standards. Since regulations prohibit a significant lowering of the quality of Tier 2 waters without an evaluation of the economic and social impacts of that action, the permit was drafted with the necessary and appropriate effluent limitations to ensure that no significant impact on Phils Creek quality will occur. Based on the report that Phils Creek has dried up during summers in the past, an evaluation was also performed in which Phils Creek was considered to be intermittent. The limitations determined to be necessary for the intermittent stream scenario were less stringent than the limitations calculated based on antidegradation requirements in the Tier 2 water. The draft permit contains the more stringent limits corresponding to a Tier 2 stream.

Public Comment: Byrd Creek, which is downstream from the proposed discharge, is impaired for bacteria.

DEQ Response

Byrd Creek is listed as impaired for the Recreation Use support goal based on fecal coliform standard violations recorded at the Rte 630 bridge. The source of the impairment is unknown at this time. In accordance with a change in the Water Quality Standards, E. coli is now limited in discharge permits instead of Fecal Coliform. The E. coli limit in the permit is required to ensure compliance with the E. coli Water Quality Standard. The facility could discharge at its design flow and at the E. coli permit limit, and still be in compliance with the E. coli Water Quality Standard. In practice, we have found that it is much more likely that the discharge will consistently have an E. coli concentration far below the limit.

Public Comment: Phils Creek immediately downstream of the proposed discharge point is used for recreation and other uses.

DEQ Response

According to the Water Quality Standards, all State waters are designated for the following uses: recreational uses; the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; wildlife; and the production of edible and marketable natural resources, e.g., fish and shellfish.

In surface waters, except shellfish waters and certain other waters, the Water Quality Standards have established a level of E. coli bacteria that if maintained will protect primary contact recreational uses. "Primary contact recreation" means any water-based form of recreation, the practice of which has a high probability for total body immersion or ingestion of water (examples include but are not limited to swimming, water skiing, canoeing and kayaking). The in-stream level for E. coli that will protect primary contact recreational uses is $\leq$ 126 colony forming units per 100 ml expressed as a geometric mean. The in-stream value has been imposed in the draft permit as the effluent limit should the facility utilize an alternative to chlorination for disinfection. Monitoring for E. coli is not required if the facility utilizes

chlorination for disinfection because chlorine has been demonstrated to be effective for E. coli disinfection resulting in concentrations less than 126 cfu/100 mL.

Public Comment: Other small creeks in Central Virginia similar to Phils Creek contain rare, threatened, or endangered species.

DEQ Response

A Memorandum of Understanding (MOU) is currently being developed to describe procedures for coordination among the Department of Environmental Quality (DEQ), the Department of Game and Inland Fisheries (DGIF) and the U.S. Fish and Wildlife Service (USFWS) in obtaining input regarding threatened and endangered species and habitat during the DEQ's VPDES permit issuance process. The MOU specifically addresses VPDES permits regulating point source discharges into state waters of Virginia and review for species and habitat that are protected by the Virginia Endangered Species Act (§29.1-563 of Chapter 5, Title 29.1, Code of Virginia) or the federal Endangered Species Act (16 USCA §§1531-1543).

In accordance with the draft MOU, the proposed discharge location was screened for the presence of state or federally listed threatened or endangered species, or designated Threatened and Endangered Species Waters using the DGIF Virginia Fish and Wildlife Information Service and the Virginia Department of Conservation and Recreation's Division of Natural Heritage online databases. Using the databases, a 2 mile radius search around the proposed discharge location including the point of discharge and through the limits of the proposed mixing zone was performed. The database searches did not indicate the presence of state or federally listed threatened or endangered species or designated threatened and endangered species waters within the mixing zone or within 2 miles of the proposed discharge location. The database searches also indicated that natural heritage resources have not been documented within two miles of the proposed discharge location.

Public Comment: There is a history of failures among small sewage treatment plants in Fluvanna County.

DEQ Response

If approved, the Southern Pines Pollution Control Plant will be designed and constructed in accordance with the Sewage Collection and Treatment Regulations. These regulations ensure that the design, construction and operation of sewage collection systems and treatment works are consistent with the public health and water quality objectives of the Commonwealth of Virginia. Technical evaluation of treatment system designs is performed by DEQ's Wastewater Engineering staff.

Facilities that experience noncompliance with their VPDES permits are encouraged by the DEQ staff to promptly remedy the permit noncompliance. Persistent or serious instances of noncompliance typically warrant enforcement action. In instances where Consent Orders are developed for the facilities, public input is invited through the public notice process. DEQ encourages public participation not only in the permitting process, but also in the compliance and enforcement process, in order to most effectively manage the discharges from the facilities we regulate. The goal of our compliance and enforcement actions is to provide serious disincentives for non-compliance and to encourage a prompt return to full permit compliance.

Public Comment: There is minimal oversight of small sewage treatment plants in Fluvanna County.

DEQ Response

The draft permit for the proposed facility establishes monitoring requirements in accordance with the VPDES Permit Manual. The draft permit requires daily monitoring of the effluent for flow, pH, dissolved oxygen, and residual chlorine. Monitoring for effluent biochemical oxygen demand and ammonia is required 3 Days/Week and monthly monitoring of the effluent for suspended solids is also required. In addition, monitoring for nutrient parameters in the effluent is required 2/Month and monitoring for residual chlorine is required in the chlorine contact tank 3/day to ensure proper disinfection of the treated wastewater.

The results from this monitoring must be submitted to the Department of Environmental Quality (DEQ) on a monthly basis. DEQ staff will inspect the facility on a periodic basis (at least once/2 years, based on its size) during which the operation, maintenance, and lab procedures of the facility are evaluated. DEQ may also collect samples for analysis to confirm the results reported by the permittee.

These same procedures and requirements have proven effective in ensuring substantial compliance after being used for many years for similar facilities throughout the State.

Public Comment: Will this plant affect the property value of the land surrounding this plant?

DEQ Response

Although property values issues are not within the purview of DEQ, we are not aware of any cases where the construction of a facility such as the Southern Pines Pollution Control Plant has resulted in decreased property values for those properties surrounding the plant.

Many of the additional comments received during the public hearing and through November 1, 2006, when the hearing record closed, can be consolidated into one of the comments received during or prior to the hearing.

Presented below is a summary of the additional comments and information received at the public hearing and prior to the close of the hearing record, and the staff's detailed responses:

Public Comment: There is not enough groundwater in this area to support the needs of the proposed development.

DEQ Response

As defined by the State Water Control Law and its corresponding regulations, Fluvanna County is not in a "groundwater management area". Consequently, there are no direct regulatory limits on groundwater withdrawal that are applicable to this facility. Facilities that withdraw an average of greater than 10,000 gallons per day must report withdrawals to DEQ under "Regulation 11" requirements; otherwise, property owners retain all rights to groundwater use.

Public Comment: Building the treatment facility in the middle of a designated Rural Preservation Area should not be allowed.

DEQ Response

Zoning, planning, and land use issues are not within the purview of DEQ, but are strictly a County issue.

Public Comment : Odors emitted from the large amount of sludge and wastewater being handled at the proposed facility would negatively impact the community built around Phils Creek.

DEQ Response

Although the operation of a wastewater treatment facility is likely to result in the release of some odors, it is the staff's experience that the odors generated from a facility of this size would not significantly impact the community if adequate buffers are provided and the facility is satisfactorily operated and maintained.

Public Comment: There was a lack of information supplied by the applicant in the permit application.

DEQ Response

Information regarding piping at the treatment facility, sewage sludge management facilities, and specific treatment processes is not necessary for the preparation of a legal and defensible draft permit. In actuality, the design of a treatment facility cannot be completed until the applicant and engineer know what permit limits the facility must meet. The draft permit requires the permittee to obtain a Certificate to Construct (CTC) and a Certificate to Operate (CTO) prior to constructing and operating the wastewater treatment facility. Technical evaluation of the treatment system design is performed by DEQ's Wastewater Engineering staff to ensure that the treatment system is designed and constructed in accordance with the Sewage Collection and Treatment Regulations and in a manner that will assure compliance with the permit requirements.

Public Comment: Toxic pollutants are not adequately addressed.

DEQ Response

Attachment A of the draft permit requires monitoring within one year of the facility's construction for all toxic parameters for which water quality criteria exist (except for Ammonia-N and Total Chlorine; permit limits and monitoring requirements already exist for those two parameters). If the results of this monitoring indicate that the wastewater discharge may result in any water quality criteria being exceeded, the facility will be required to take whatever action is necessary to ensure that water quality criteria are maintained. The Attachment A monitoring for facilities of this size treating domestic sewage rarely indicates the presence of toxic pollutants in concentrations that would result in water quality criteria being exceeded.

Public Comment: Other sewage disposal alternatives or treatment options were not considered.

DEQ Response

There is no prohibition in our laws or regulations against anyone applying for a wastewater discharge permit. If an application for a permit is submitted and the proposal would be in compliance with local zoning ordinances, then DEQ has a legal obligation to prepare a draft permit that would be protective of water quality. In fact, this permit would require a much higher quality wastewater than that discharged from a typical septic system.

Public Comment: What nutrient standards will the discharge be required to meet?

DEQ Response

The draft permit includes an annual average concentration limits for Total Nitrogen and Total Phosphorus of 8.0 mg/L and 1.0 mg/L respectively. The draft permit also includes nutrient loading limits of 0 lbs/day. In addition, the owner must obtain coverage under the General Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia. Under the General Permit, the owner must demonstrate to the Department that waste load allocations sufficient to offset the delivered Total Nitrogen and Total Phosphorus loads have been acquired.

Public Comment: Questions regarding the procedure used to determine the flow statistics for Phils Creek that were used in the water quality modeling.

DEQ Response

Fine Creek was chosen to represent Phils Creek because the continuous record gage on Fine Creek at Fine Creek Mills was the closest continuous record gage to the proposed discharge point that had a similar drainage area. There is a gage for the Rivanna River at Palmyra; however, the drainage area for that gage is 664 square as compared to a drainage area of 9.94 mi^2 at the discharge point and a drainage area of 22.1 mi^2 at the Fine Creek gage.

The flow frequencies at the discharge point were determined by performing a drainage area comparison with the Fine Creek gage. This procedure for determining flow frequencies is not unique to this permit and is in accordance with established agency methods.

Public Comment: The permit should require the facility to post operating policies, monitoring results, and Notices of Violation on a publicly accessible website.

DEQ Response

Under the Freedom of Information Act (FOIA), all documentation that DEQ has on file is part of the public record and is available to the public upon request. We encourage interested citizens to work with Southern Pines to get the most up-to-date information on the STP performance. We have also encouraged Southern Pines to develop a website that provides information regarding the performance of their wastewater treatment facilities.

Public Comment: Disinfection using chlorine produces disinfection byproducts that cause health problems. Also, current monitoring requirements intended to ensure adequate disinfection of the discharge are inadequate.

DEQ Response

This comment was forwarded to our Central Office staff and to the Health Department for their consideration. Until new guidance is received from our Central Office staff, we must assume that the risk from chlorination byproducts is sufficiently low to preclude any further analysis at this time.

A Local Government Ordinance Form (LGOF) was sent to the Fluvanna County Administrator by the applicant on May 3, 2006, via certified mail. The LGOF provides the county, city, or town in which the discharge is to take place the opportunity to indicate that the location and operation of the discharging facility are consistent with applicable ordinances adopted pursuant to Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2 of the Code Virginia. The Code of Virginia also specifies that the county, city, or town shall inform in writing the applicant and the Board of the discharging facility's compliance or noncompliance not more than thirty days from receipt by the chief administrative officer, or his agent, of a request from the applicant. Should the county, city, or town fail to provide such written notification within thirty days, the requirement for such notification is waived. The LGOF was not received from Fluvanna County within thirty days, so processing of the application was continued. On October 20, 2006, a request was sent to sent to the Fluvanna County Administrator asking him to indicate what permits would be required from Fluvanna County for Southern Pines to be a viable project for the county. As of the date of this memorandum, no response has been received from the County.

The General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia has gone into effect since this draft permit was developed, and the applicant has a legal obligation to register for coverage under the general permit by January 1, 2007. Guidance issued regarding permitting considerations for facilities in the Chesapeake Bay watershed specifies that until the final procedures for review and approval of offsets have been developed, the following standard permit condition should be included in any new discharge permit for facilities that are required to offset nutrient waste loads.

Any annual Total Nitrogen and/or Total Phosphorus loadings above and beyond those permitted prior to July 1, 2005 shall be offset subject to a DEQ-approved trading contract prepared in accordance with sections 62.1-44.19:12 - :19 of the law and 9 VAC 25-820-10 et seq., and including, but not limited to the following:

a. Discussion of the source of the acquired allocations,
b. Discussion of other permitted facilities involved in the trade, and
c. Discussion of any non-point source allocations acquired.

This proposal shall be approved prior to CTO issuance. Once approved, the conditions of the proposal pertaining to verification of non-point allocations acquired, or self-offsetting practices implemented, become an enforceable part of this permit.

In summary, the staff believes that the proposed permit is protective of both surface and groundwater quality, will result in no detrimental effects to the environment, and is written in full compliance with all applicable State and Federal regulations.

Recommendation: The staff recommends that the Board authorize the issuance of VPDES Permit No. VA0091987 as drafted with the addition of the following permit condition.

Any annual Total Nitrogen and/or Total Phosphorus loadings above and beyond those permitted prior to July 1, 2005 shall be offset subject to a DEQ-approved trading contract prepared in accordance with sections 62.1-44.19:12 - :19 of the law and 9 VAC 25-820-10 et seq., and including, but not limited to the following:

a. Discussion of the source of the acquired allocations,
b. Discussion of other permitted facilities involved in the trade, and
c. Discussion of any non-point source allocations acquired.

This proposal shall be approved prior to CTO issuance. Once approved, the conditions of the proposal pertaining to verification of non-point allocations acquired, or self-offsetting practices implemented, become an enforceable part of this permit.

Reconsideration of Extension of VWP Permit No. 93-0902 for King William Reservoir: The City of Newport News has asked the State Water Control Board to reconsider their September 2006 denial of an extension of Virginia Water Protection (VWP) Permit No. 93-0902 for construction and operation of the King William Reservoir. This reconsideration of the Board's decision was requested by the City of Newport News in a letter dated November 1, 2006. Should the Board elect to reconsider their September 2006 action, this memorandum includes the original text of the memorandum for that meeting as well as a summary of the decision made by the Board at the September meeting.

Background: The City of Newport News is planning to construct a reservoir in King William County to provide water supplies to the cities of Newport News, Hampton, Poquoson, and Williamsburg and the counties of James City, New Kent, King William and York. They have obtained local, state and federal permits for this project, as well as certification from Virginia's Coastal Zone Management Program, and each action taken on this project has generated significant stakeholder interest. The primary issues of concern to the public are the need for the additional water supply, the wetland and river impacts, the impacts to the fisheries, and the impacts to cultural and historic resources.

In 1997, the State Water Control Board issued Virginia Water Protection Permit No. 93-0902 to authorize impacts to 437 acres of wetlands, establish compensatory mitigation requirements, and ensure minimum instream flows in the Mattaponi River will be protected. This permit was appealed by the City of Newport News, by a coalition of environmental organizations and representatives of the Mattaponi Indian Tribes. All of these lawsuits were resolved in favor of the Commonwealth by June, 12 2006. This permit will expire in 2007.

On May 16, 2003, the Marine Resources Commission denied a permit to authorize the use of state-owned bottom lands for this permit. On June 24, 2003 VMRC denied the City's request to conduct a formal hearing on the issue. That decision was appealed by the City of Newport News to the Circuit court. Per agreement between VMRC and the City, the Court remanded the decision to VRMC with instructions to take additional evidence and conduct a hearing. After the formal hearing, VMRC reversed their action and issued a permit which imposed screening and time of year restrictions on the withdrawals to protect the fisheries resources.

The U.S. Army Corps of Engineers evaluated the application for a permit under Section 404 of the Clean Water Act from 1993 through 2005. The final decision to issue the federal permit was made on July 29,

2005. The Mattaponi Indian Tribes, the Chesapeake Bay Foundation, the Southern Environmental Law Center and the Sierra have recently appealed the federal permit.

There has been significant public and political involvement both in support of and in opposition to this project. The regulatory decisions made on this project have been made based upon the best technical and scientific information available and a thorough analysis of the requirements and authorities under each regulatory program. Any changes made to the permit, during either the pending permit amendment or any future renewal of the permit, must be based upon a thorough analysis of the new information gained from the reports generated during the extension period and scientific and technical data provided by the applicant and the public.

The Current Action: On December 13, 2005 The City of Newport News requested a modification of their Virginia Water Protection (VWP) permit for the King William Reservoir project. The modifications would set document submittal deadlines and extend the effective date of the permit by five years (permit to expire in 2012 instead of 2007). This modification would allow time for the completion of a number of studies and plans that were required as conditions of the existing permit. Because of the extended nature of the federal permitting process for this project, many of these actions could not be completed within the schedule contained in the original VWP permit. The City of Newport News has requested a modification to:

(1) Extend the term of the permit by five years, from December 22, 2007 to December 22, 2012;
(2) Change the submittal date of the Drought Water Conservation Plan from December 22, 2003 to December 1, 2006;
(3) Change the submittal date of the Ecological Monitoring Plan from December 22, 2003 to June 1, 2006 (note that this report was received on that date and is currently under review);
(4) Change the submittal date of the Salinity Monitoring Plan from December 22, 2003 to March 31, 2009;
(5) Change the submittal date of the Final Wetland Mitigation Plan from December 22, 2003 to December 31, 2010; and
(6) Change the submittal date of the Operations and Management Plan from December 22, 2003 to December 1, 2011.

This proposed permit amendment and extension of the permit, assures that the results of these studies will be available to the public, DEQ, and the Board when evaluating reissuance of the permit.

Public Notice: The draft permit extension was public noticed in the Richmond Times Dispatch, Daily Press, and Tidewater Review newspapers on April 5, 2006 for a 30-day public comment period that ended on May 5, 2006. During the comment period two state agencies, the Virginia Dept. of Health and Dept. of Game and Inland Fisheries, commented on the proposed modification, both in favor of DEQ approving the modification request. Three organizations (Sierra Club, Chesapeake Bay Foundation, and the Coastal Virginia Waterman's Association) and 141 citizens submitted comments all of which included a request that the State Water Control Board hold a public hearing regarding the proposed permit extension. or one or more public hearings.

The DEQ Director granted the request for public hearing, and a Notice of the Public Hearing and comment period was published on the Virginia Regulatory Town Hall web page on Wednesday, June 7, 2006 and in the Richmond-Times Dispatch and the Virginian-Pilot newspapers on Sunday, June 11, 2006. Mr. Michael McKenney, member of the State Water Control Board, served as Hearing Officer at the public hearing, which was held at 7:00 p.m. on July 20, 2006, at the James City County Government Complex in Williamsburg, Virginia. Approximately 130 people attended the meeting and approximately 85 individuals spoke.

DEQ received 733 comments by the close of the hearing comment period on August 4, 2006. A summary of these comments is available at the link below.

After the public hearing, DEQ received requests to extend the public comment period from Alliance to Save the Mattaponi and from the Virginia Watermen's Association so that organizations could publicize the pending action and solicit additional comments. DEQ has denied these requests.

In addition to the summary of the written and verbal comments received during the draft permit public notice, public hearing and subsequent comment period, we have included an overall summary of the major categories of comments along with our response.

September 2006 Board Action: The Board presentation summarized the major categories of comment as follows:

Support Extension Request: VDH, DGIF, some citizens, some state and local officials support the extension to allow time to complete studies prior to considering permit reissuance; Commenters believe this will ensure that studies will be completed before the Board is asked to consider permit reissuance

Deny Extension Request Based on Overall Opposition to Reservoir Project: Commenters believe the purpose and need for the reservoir should be re-evaluated at this time, that the project is not viable with new restrictions imposed by VMRC permit, and that there is significant impact to the Native American Community and to wetlands and fisheries; DEQ believes these issues have been evaluated with the VMRC and Corps permit issuances and can be properly addressed by the SWCB after the results of the required studies provide more information

Deny extension request because the VWP permit is inconsistent with the Corps and VMRC permits issued after the DEQ permit : Many citizens and groups believe that the VWP permit should not be extended because it contains conditions different than permits issued later for this project and therefore the VWP permit is no longer valid; DEQ has looked closely at the conditions in all three permits and believes that the conditions are not contradictory; There are often different conditions when multiple permits are issued, which usually happens for projects of this type, and the most stringent conditions always apply. Conditions imposed by other agencies are neither binding on the SWCB nor are otherwise required to be placed in the VWP permit.

Deny extension request as there have been significant changes to the project that do not allow for extension: Many citizens and groups believe that the project has changed since issuance of the original VWP permit, because of requirements in the VMRC and Corps permits for the project. According to the VWP regulation DEQ must deny a permit extension where there are changes in originally authorized activities or where the activity and its underlying conditions become unattainable. DEQ interprets the regulation to authorize the SWCB to extend this VWP permit as long as the impacts contemplated in the original permit are not modified in the extension; in this case no change in scope or location of impacts as been requested or contemplated.

After the staff presentation, the Board heard from 27 speakers, including elected officials, the City of Newport News and other interested persons. Comments were presented in support of and against the permit modification/extension and were reflected the comments presented during the public hearing comment period.

Following the public comment, the staff recommendation was presented as follows:

- Approve the extension of the permit and change in receipt dates for the subject reports, as indicated
- Require that the permittee submit an application for permit reissuance concurrent with submittal of the Final Wetland Mitigation Plan

On a motion made by Ms. Jain, the Board voted to go into closed session pursuant to the provisions of Section 2.2-3711 (A) (7) of the Code of Virginia for consultation with legal counsel and briefings by staff members pertaining to actual or probable litigation, and consultation with legal counsel regarding specific legal matters requiring the provision of legal advice by counsel. Pursuant to Section 2.2-3712 (D) of the Code of Virginia, the Board, by roll call vote, unanimously certified that only those matters identified, which are lawfully exempted from the requirements of the Freedom of Information Act, were considered during closed session.

Upon returning to open session, and after some additional questioning of staff and representatives of the permittee, a motion to deny the staff recommendation was made by Mr. McKenney and seconded by Ms. Jain. A substitute motion to accept the staff recommendation was made by Mr. Kiser but died due to lack of a second. The original motion to deny the staff recommendation was then passed 6 to 1, with Mr. Kiser casting the dissenting vote.

Staff Recommendation

Should the Board vote to reconsider their September action, staff will recommend that the Board consider the following actions:

1. Approve the change in receipt dates for the subject reports as indicated
2. With regard to the expiration date, add the following condition to the permit: The permit shall expire on December 31, 2010, unless a complete application is submitted by that date. If a complete application for reissuance of the permit is submitted by December 31, 2010, then the permit will expire on December 31, 2012. Such application shall include a final mitigation plan prepared in accordance with Section D of this permit. The final mitigation plan and the application to reissue this permit shall be considered concurrently and, notwithstanding the provisions of Section D.2 of this permit, the final determination on whether or not to approve those submissions shall not be delegated to the Director.
3. With regard to project construction and site acquisition, add the following conditions to the permit:

   During the term of this permit, there shall be no construction of project facilities or other site preparation or construction activity, except as necessary to complete the evaluations, studies, plans and

reports required by this permit or the permit issued by the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act for the construction of this project.

Any interest in land acquired after December 14, 2006 and before this permit expires or is reissued shall not be construed as increasing any investment backed expectation that a permit to authorize construction and operation of the reservoir and appurtenant structures will be issued or re-issued in the future.

For the additional material on the King William Reservoir that was included in the minibook for the September 6, 2006, meeting go to:
http://www.townhall.virginia.gov/Utils/DisplayContent.cfm?fileName=E%3A%5Ctownhall%5Cdocroot%5Cmeeting%5C7738%5Cagenda%5Fdeq%5F7738%5Fv2%2Epdf

Boston Water & Sewer Company - Petition for Nutrient Waste Load Allocations in 9 VAC 25-720 (Water Quality Management Planning Regulation): Staff will recommend that the Board deny a petition from Boston Water and Sewer Company ("Boston W&S"), which requested nutrient waste load allocations under the Water Quality Management Planning Regulation (9 VAC 25-720) for their wastewater treatment facility. At the time that significant dischargers were assigned nutrient waste load allocations in amendments to 9 VAC 25-720, the Boston W&S facility was permitted and certified to operate at a design capacity of 15,000 gallons per day. This design capacity is below the threshold for the definition of a significant discharger (0.5 MGD for facilities discharging to non-tidal waters in the Bay watershed); therefore, Boston W&S did not receive nutrient waste load allocations. Boston W&S proposes to expand the plant up to a maximum flow tier of 0.45 MGD, which is still below the threshold for a significant discharger. As an expanding, non-significant discharger, per Virginia Code §62.1-44.19:15.A.2, Boston W&S must:

- acquire waste load allocations sufficient to offset any increase in the delivered nutrient loads resulting from the expansion beyond the permitted capacity as of July 1, 2005;
- at a minimum, install biological nutrient removal technology at the time of the expansion.

At the Board's 9/21/05 meeting, nutrient waste load allocations (WLAs) were adopted for significant dischargers in the Shenandoah-Potomac, Rappahannock, and Eastern Shore Basins. At a subsequent meeting on 11/15/05, the Board adopted nutrient WLAs for the remaining significant dischargers in the York and James Basins, thus completing the assignment of annual nitrogen and phosphorus load allocations for the Bay watershed's significant dischargers. At the November 2005 meeting the Board also authorized the DEQ Director to receive any petition requesting amendment of the adopted nitrogen or phosphorus WLAs on the Board's behalf and, upon completion of the public comment period on the petition, if the recommendation would be to initiate a rulemaking, the DEQ Director was authorized to take that action. The DEQ Director was not authorized to deny a petition for rulemaking. By letter dated June 30, 2006, Richard H. Sedgley, legal counsel for Boston W&S, requested "*the amendment of the Water Quality Management Planning Regulation to include total nitrogen and total phosphorus waste load allocations for the subject wastewater treatment facility within section 70.C (9 VAC 25-720)*". . ." *Section 70.C. should be amended to provide WLAs for the separate permitted tiers as follows:*

- *0.075 MGD = 1,957 kg/yr TN; 259 kg/yr TP*
- *0.150 MGD = 1,657 kg/yr TN; 207 kg/yr TP*
- *0.250 MGD = 2,761 kg/yr TN; 345 kg/yr TP*
- *0.450 MGD = 4,970 kg/yr TN; 621 kg/yr TP"*

"The 0.150, 0.250 and 0.450 MGD tiers will, pursuant to the Code and existing Permit, be required to employ BNR and achieve 8 mg/l TN and 1 mg/l TP effluent concentrations. . . The 0.075 MGD tier is required to meet. . . secondary treatment. . .(18.9 mg/l TN and 2.5 mg/l TP)".

The rulemaking to assign nutrient WLAs began in January 2004 and concluded in late 2005. Affected facilities were identified as "significant dischargers" of nutrients, which included (see 9 VAC 25-720-10, Definitions) point source dischargers in the Chesapeake Bay watershed with a design capacity of 0.5 million gallons per day (MGD) or greater, and planned or newly expanding dischargers to the Bay watershed that are expected to be in operation by 2010 with a permitted design of 0.5 MGD or greater. At the time, Boston W&S owned and operated a facility (VPDES #VA0065358) permitted and certified to operate at a design capacity of 15,000 gallons per day. For this reason, Boston W&S was not identified as a significant discharger and did not receive nutrient WLAs under Board-adopted amendments to 9 VAC 25-720. This determination did not constitute a

case decision, as it was applied to every facility in the Bay watershed that was identified as a non-significant discharger. Further, the proposed expansion of the Boston W&S facility to 0.45 MGD is still below the threshold for a significant discharger, so nutrient WLAs cannot be assigned. The General Assembly addressed non-significant dischargers in the 2005 Nutrient Credit Exchange law (VA Code, Chap. 3.1 of Title 62.1, §44.19:12 - 44.19:19) by allowing for "permitted design capacity" based on the facility's discharge as of July 1, 2005. This action effectively "held the line" on the non-significant dischargers' nutrient loading, but did not assign WLAs enumerated in the WQMP Regulation. Existing non-significant dischargers are not required to address their discharge of nutrients unless they expand their facility. If they expand they would need to register under the Watershed General Permit and offset any nutrient loads over their permitted design capacity, thereby holding the line on their nutrient discharge. This is the role of non-significant dischargers in helping to maintain the overall nutrient loading caps in each river basin to restore the Chesapeake Bay. SUMMARY OF PUBLIC COMMENTS RECEIVED: The petition information was published in the Virginia Register on 9/18/06 and the public comment period closed on 10/10/06. Two comments were received:

1. Richard H. Sedgley, AquaLaw – reiterated much of the basis for the requested nutrient waste load allocations, as claimed in the original petition. Asserted the following points:
   a. The Board may add and modify waste load allocations.
      Agency Response: Agreed, for significant dischargers.
   b. No rational basis to allow "significant" dischargers permitted by 7/1/05 to modify WLAs, but not smaller dischargers.
      Agency Response: The Board has adopted a rational procedure (see 9 VAC 25-720-40.D) for considering adjustments to individual nutrient waste load allocations. Waste load allocations are not assigned to non-significant dischargers, therefore this provision does not apply to them.
   c. Public rights, such as the right to discharge, must be managed equitably.
      Agency Response: A VPDES permit does not convey a right to discharge. Per VA Code § 62.1-44.4(1), "No right to continue existing quality degradation in any state water shall exist nor shall such right be or be deemed to have been acquired by virtue of past or future discharge of sewage, industrial wastes or other wastes or other action by any owner. The right and control of the Commonwealth in and over all state waters is hereby expressly reserved and reaffirmed".
   d. VA Code protects small dischargers permitted prior to 7/1/05.
      Agency Response: Agreed, in that the General Assembly did not require non-significant dischargers to install stringent nutrient removal technology and reduce their current loads to comply with individual waste load allocations. Existing smaller plants were allowed to continue discharging at their permitted capacity with no additional controls required, unless they expand. In that case, the delivered nutrient loads cannot increase and the discharger must install technology-based treatment at a minimum, and offset any load increase that results from the expansion.
   e. Boston W&S merely requests small WLAs.
      Agency Response: While the requested WLAs are relatively small, the impaired condition of the Bay and its tidal tributaries results from a multitude of small incremental nutrient loads that collectively cause nutrient-over enrichment. Virtually all nutrient sources throughout the Bay watershed have to be factored into the clean-up effort, and current point source loads must be capped and maintained at reduced levels into the future to aid in water quality standards compliance. For this reason, point source allocation caps have been adopted in 9 VAC 25-720, and the General Assembly required all non-significant dischargers to maintain their permitted capacity loads even in the event of an expansion.
2. Mike Gerel, VA Staff Scientist, Chesapeake Bay Foundation – Petitioner is not eligible to receive a WLA for their existing or proposed new facility. If the new facility takes the existing 15,000 gpd facility off-line, the petitioner may apply for an aggregate WLA once the Certificate to Operate is issued for the new facility, and must then completely offset any additional load above any assigned WLA.
   Agency Response: Essentially agree. However, any "aggregate mass load limit" received will not be an assigned waste load allocation (WLA) in the WQMP Regulation (9 VAC 25-720) because the new facility is not a significant discharger. The provision governing such an aggregate limit is covered in Part 1, B.3.c of the General VPDES Watershed Permit for Nutrient Discharges and Trading in the Chesapeake Bay Watershed (9 VAC 25-820-10).

Staff recommends that the Board deny the petition, based on these factors:

1. The Boston W&S facility was a non-significant discharger during the rulemaking for nutrient discharge control regulations. Therefore, it was not assigned nutrient waste load allocations.
2. The proposed facility expansion to 0.45 MGD is still below the threshold for a significant discharger, and remains ineligible for assignment of nutrient waste load allocations.
3. As a result, the facility is considered an expanding non-significant discharge and per Virginia Code §62.1-44.19:15.A. 2, Boston W&S must:
    - acquire waste load allocations sufficient to offset any increase in the delivered nutrient loads resulting from the expansion beyond the permitted capacity as of July 1, 2005;
    - at a minimum, install biological nutrient removal technology at the time of the expansion.

Report on Significant Noncompliance: Three permittees were reported to EPA on the Quarterly Noncompliance Report (QNCR) as being in significant noncompliance (SNC) for the quarter ending June 30, 2006. The permittees, their facilities and the reported instances of noncompliance are as follows:

1. Permittee/Facility: **Town of Colonial Beach, Colonial Beach Sewage Treatment Plant**
   Type of Noncompliance: **Failure to Meet Permit Effluent Limit (Ammonia Nitrogen)**
   City/County: Colonial Beach, Virginia
   Receiving Water: Monroe Bay
   Impaired Water: Monroe Bay is listed on the 303(d) report because of seasonal condemnation of shellfish beds. The source of the contamination giving rise to the condemnation is unknown.
   River Basin: Potomac and Shenandoah River Basins
   Dates of Noncompliance: December 2005 and February and March, 2006
   Requirements Contained In: VPDES Permit
   DEQ Region: Piedmont Regional Office
   Staff of the Piedmont Regional Office are evaluating this case for formal enforcement action.
2. Permittee/Facility: **Stafford County, Aquia Wastewater Treatment Facility**
   Type of Noncompliance: **Failure to Meet Permit Effluent Limits (Ammonia Nitrogen, Total Phosphorus, and Biochemical Oxygen Demand)**
   City/County: Stafford, Virginia
   Receiving Water: Unnamed tributary to Austin Run
   Impaired Water: Austin Run is listed on the 303(d) report as impaired for fecal coliform. The source of the contamination is unknown.
   River Basin: Potomac-Shenandoah River Basin
   Dates of Noncompliance: March, April, May and June 2006
   Requirements Contained In: VPDES Permit
   DEQ Region: Northern Virginia Regional Office
   Staff of the Northern Virginia Regional and Central Offices are working together to settle this matter. It is anticipated that a consent special order, addressing the referenced violations, will be presented to the Board, for its approval, at its next quarterly meeting.
3. Permittee/Facility: **Town of Fredericksburg, Fredericksburg Wastewater Treatment Facility**
   Type of Noncompliance: **Failure to Meet Permit Effluent Limit (Total Kjeldahl Nitrogen)**
   City/County: Town of Fredericksburg, Virginia
   Receiving Water: Rappahannock River
   Impaired Water: The Rappahannock River is listed on the 303(d) report as impaired because of fecal coliform levels and PCB contamination of fish tissues. The source of the contamination is unknown.
   River Basin: Rappahannock River Basin
   Dates of Noncompliance: May and June, 2006
   Requirements Contained In: VPDES Permit
   DEQ Region: Northern Virginia Regional Office
   A consent order addressing the referenced violations will be presented to the Board, for its approval, at its December meeting

Winston Acre Farm, Louisa County - Consent Special Order w/ Civil Charges: Dr. and Mrs. White are the owners of Winston Acres Farm ("Winston"), a poultry farm with a maximum of 42,000 turkeys located in Louisa County. The property drains into Little Peter's Creek in the York Basin River. Winston was first cited for violating its permit after an annual site inspection conducted by DEQ on September 21, 2004 revealed uncovered litter piles, an expired litter analysis, an outdated Nutrient Management Plan ("NMP"), and a lack of litter records available for inspection. As a result of this inspection, Winston was provided with a list of corrective actions needed and an expected completion date along with their inspection report. A follow-up inspection was conducted on November 19, 2004 and found that the noted violations had not been addressed requiring DEQ to send Winston a warning letter on December 2, 2004. Another annual inspection was performed by DEQ on September 9, 2005. This inspection found the previously mentioned violations along with additional violations such as loose litter, a drainage pipe with an unknown origin, and inadequate mortality disposal. Winston was again provided with a list of corrective actions needed and an expected completion date. A Notice of Violation was also sent on September 14, 2005. The follow-up inspection on October 14, 2005 found a significant volume of uncovered litter still present and considerable leaching from the litter piles was occurring. DEQ also noted that none of the violations noted in previous inspections since 2004 had been properly addressed and a second NOV was sent on October 17, 2005. On October 26, 2005, the Whites case was referred for enforcement after they failed to address those violations cited in the NOVs. An Order was drafted in the winter of 2005. However, this order was not immediately presented to Winston as DEQ continued internal discussions on the most effective way to proceed with this case. An inspection conducted on April 26, 2006 found continuing violations that were captured in the inspection report sent to Winston on May 1, 2006. The report again contained the corrective actions needed and the expected completion dates. The report did also note that a portion of the loose litter that was previously present had been removed, however, per Mrs. White's admission, the litter entered the banks of an intermittent stream during the removal process. On June 21, 2006, DEQ received a letter sent to Dr. White from Virginia Department of Conservation and Recreation approving an updated NMP for Winston. This approval cured the violation first cited in 2004 of an outdated NMP. DEQ's most recent inspection occurred on July 26, 2006. During this inspection, DEQ found remnants of a litter pile that had been placed and mostly removed since the June 21, 2006 inspection. In addition, litter was also found surrounding the locations of the formerly removed piles extending several feet into dense vegetation. The proposed order requires Winston to: (1) submit litter transfer records to DEQ quarterly; (2) take necessary corrective actions to properly compost mortalities in accordance with the Virginia Cooperative Guidelines; and (3) remove all loose litter from upland areas by December 31, 2006. Civil charge: $1,750

City of Fredericksburg WWTF - Consent Special Order w/ Civil Charges: The City of Fredericksburg ("City") owns and operates a 4.5 MGD wastewater treatment facility ("WWTF") that treats wastewater and sewage from the residences, businesses and institutions of the City. The City was referred to enforcement on June 13, 2006 for exceeding permit effluent limits and failing to meet Reliability Class I standards. DEQ staff performed a technical and laboratory inspection on April 27, 2006 and another site inspection on May 25, 2006 for the purposes of conducting a pretreatment audit prior to the permit being reissued. Both inspections revealed numerous operational and maintenance deficiencies at the WWTF as noted in the Facility Technical Inspection Report dated June 21, 2006. Among the process units observed, a primary clarifier, three of four primary effluent pumps, a sludge pump and a belt filter press were not in operation. Observations made during both inspections revealed that the WWTF does not meet Class I Reliability because of the numerous process units that are designed to provide redundancy are not in service. Furthermore, DEQ compliance and permitting staff believe that the permit effluent limit violations are directly attributable to these Operations and Maintenance (O&M) issues. DEQ and representatives from the City's Management and Department of Public Works met on July 10, 2006 to discuss these compliance issues and options to return to compliance. As a result of the meeting, the City agreed to have its environmental consultant, Hazen and Sawyer, review the operational records and recommend improvements to process controls. On July 21, 2006, the City submitted its response prepared by Hazen and Sawyer that included a process improvements program memorandum and Class I Reliability and corrective action summaries. The recommendations included reducing the mixed liquor suspended solids (MLSS) at the WWTF to ensure that conditions are ideal for the biological nitrification process so that consistent permit compliance can be achieved. The response also included the corrective actions taken to date (repairing the effluent and sludge pumps) and future corrective actions planned by the City to address the remaining maintenance and equipment reliability issues. On September 15, 2006, the City applied to enroll the

WWTF in DEQ's Environmental Management Program (EMS) program, a voluntary program designed to assure that operations at facilities such as the City's WWTF are conducted in accordance with best management practices and in a manner that minimizes impacts on the environment. The initial cost to the City for the EMS program is $21,500 as well as an ongoing commitment of staff resources to implement the program. To date, the cost to the City to complete repairs of the process units has been over $200,000. The proposed Order requires the City to: (1) complete repairs to Primary Clarifier #1 and Belt Filter Press #1; (2) initiate the plant performance testing program pursuant to the O&M Manual; and (3) submit revisions to the O&M Manual to include recommended maintenance and operational changes. Civil charge: $4,900

Minarchi Mobile Home Park, Caroline County - Consent Special Order w/ Civil Charges: Minarchi Mobile Home Park, Inc., ("Minarchi") located in Caroline County, owns and operates a wastewater treatment plant which serves a mobile home park of approximately 56 homes. Minarchi was referred to enforcement for various administrative violations including the late submittal of their DMR; failure to reapply for a new permit within the prescribed deadline; submitting an incomplete application for a new permit; and failure to provide information requested by DEQ including chain of custody & certificate of analysis, certification and maintenance logs, and temperature monitoring data. Furthermore, Minarchi has been discharging effluent into state waters without a permit since December 23, 2005. Minarchi's permit expired on December 22, 2005. Both the permit, and 9 VAC 25-625-100 required Minarchi to reapply for a new permit within 180 days of the expiration date or by June 24, 2005. DEQ did not receive Minarchi's application packet until December 7, 2005. The application was incomplete as it lacked the required closure plan and financial assurance documentation. These documents were not received by the expiration date of the permit, December 22, 2005. In spite of the permit expiration, Minarchi continued to discharge effluent into state waters. At Minarchi's request, DEQ provided a guidance letter to Minarchi on March 29, 2006 setting forth the minimum requirements needed for the closure plan. The letter gave Minarchi a 30 day deadline (i.e. April 29, 2006) for submission of the closure plan and financial assurance documentation. The closure plan was not received until on May 23, 2006 and did not include the financial assurance documentation. DEQ finally received Minarchi's financial assurance letter on July 21, 2006 and deemed it unacceptable. The corrected documentation was then received on August 28, 2006. Also received on this date was additional documentation, including the chain of custody & certificate of analysis, first requested by the DEQ on September 27, 2005. Minarchi's permit is currently under review. There are no additional documents required for completion and no further steps required for Minarchi to be in compliance. Proposed consent order requires Minarchi to pay civil fine of $7000.00

Pilot Travel Centers, LLC, Caroline County - Consent Special Order w/ Civil Charges: Pilot Travel Centers, LLC ("Facility") is headquartered in Knoxville, Tennessee and owns and operates the Pilot Oil Center # 291. The Facility is a travel center, conducting retail sales of fuels (gasoline, diesel, and kerosene), including a convenience store and fast food restaurant. Industrial discharge results from stormwater runoff from the mostly asphalted 4.1-acre site consisting of fueling islands and parking areas. Runoff is directed into 4 drop inlets that connect to a grit chamber and a 20,000-gallon oil/water separator. Between February and November 2005, Pilot reported five exceedences of the Total Petroleum Hydrocarbons (TPH) Permit limits in its Discharge Monitoring Report (DMR) submissions to DEQ. On January 27, 2006, DEQ conducted a site inspection of the Facility and found many of the requested documents unavailable, as the Facility was undergoing renovation. Over the next few weeks, the owner began submitting the requested documents to DEQ. During its review, DEQ discovered that the DMR being submitted as TPH results had been misreported and were actually oil and grease results. This has been the case each month since the permit was issued in April 2001. The document review also revealed that the Storm Water Pollution Prevention Plan ("SWPPP") site map had not been updated to reflect the current conditions and the pH meter temperature probe was not certified with a National Institute of Standards and Technology ("NIST") traceable thermometer, as required. Pilot's consultant, Groundwater & Environmental Services, Inc. ("GES"), said that the oil and grease reporting was unintentional, and likely resulted from a mistake early on when a wrong lab test was requested. This errant test for oil and grease was repeated sample after sample, month after month, and went undetected until DEQ brought this to Pilot's attention with the February 24, 2006 Notice of Violation (NOV). GES asserts that the test used by Pilot is accepted by the EPA for both oil and grease as well as TPH. However, the DEQ fact sheet issued with the Permit actually specified that one of three methods may be used, none of which included the method used by Pilot. The site map and personnel have been updated in the SWPPP and the pH meter has been certified at a

laboratory with an NIST traceable thermometer. Pilot began utilizing the correct test for TPH in April 2006. TPH levels were reported above the permit limits between April and July 2006. In addition, Pilot failed to submit the O&M Manual for review by May 31, 2006 as required by the permit. DEQ began discussing a consent order with Pilot in June 2006 to address the known violations to that date. A draft order was signed by Pilot on June 30, 2006 and Pilot complied with the provisions found within, including cleaning the oil and water separator. However, samples were collected from the facility on July 12 and 21, 2006 which yielded TPH concentrations of 77 mg/L and 41 mg/L, respectively. The permit limit is 10 mg/L. DEQ called GES to discuss these high values and the possibility of postponing the approval of the final consent order. Shortly after this discussion, on August 29, 2006, DEQ visited the Facility and observed an industrial liquid degreaser at the site for the power washing of the truck fueling areas. The use of such a detergent is strictly prohibited by the permit. Pilot informed DEQ that the use of the degreaser had ceased in May or June of 2006. In light of these new findings, DEQ removed the draft order from the September 2006 State Water Board Meeting and began drafting a new consent order which took into account this new violation. The order requires Pilot to thoroughly clean the oil and water separator within 7 calendar days of receiving any laboratory results where the monthly TPH level is ≥10.0 mg/L. Pilot is also required to submit an updated O&M Manual within 90 days of the effective date of the order which includes a procedure for cleaning the oil and water separator that will minimize the amount of TPH released after cleaning. In addition, Pilot will provide DEQ with a completed Chain of Custody & Certificate of Analysis for each monitoring event required by the permit. Civil charge: $5,700

Woodbridge MHP STP, Prince William County - Consent Special Order w/ Civil Charges: Woodbridge MHP, LLC ("Woodbridge") owns a 0.0198 MGD sewage treatment plant ("STP") that is located in Prince William County, Virginia and treats wastewater from the approximately 98 units at a mobile home park. DEQ reissued Woodbridge's permit effective December 4, 2002 and it expires on December 3, 2007. Woodbridge was referred to enforcement on December 15, 2005 for exceeding permit effluent limits and submitting financial assurance documents late. The STP is an antiquated activated sludge plant that is near its design capacity with the current flow it receives. Because of inflow and infiltration (I/I) issues with the collection system during heavy rainfall events the influent flow usually surges at the STP causing plant upsets that result in solids loss and unusual discharges to the receiving stream. As required by the permit, during these unusual discharge events the operator, Environmental Systems Service, Ltd. ("ESS"), collects samples of the effluent and reports the data on the monthly Discharge Monitoring Report (DMR) submissions. All of the effluent limit violations that are the basis of the referral are a result of sampling from these unusual discharge events. As a result of the noncompliance issues with the STP and the water treatment system at the mobile home park, Woodbridge has been exploring its alternatives to return to compliance since the winter of 2005-2006. Woodbridge's options include a major upgrade of the existing STP and collection system, constructing a new STP, hooking up to Prince William County Service Authority ("PWCSA") or closing the mobile home park and the STP. Excluding costs to upgrade the collection system and roads up to PWSCA's standards, PWSCA estimated that it would cost approximately $850,000 just for the "tap fees" to the mobile home park. Woodbridge asserts that with PWSCA's conditions the connector project is not financially feasible. Woodbridge explored state, federal, and county grants and loans for low income housing to lessen the financial burden but to date has been unable to secure appropriate funding for the connector project. Since the funding issues for the connector project cannot be resolved, Woodbridge has agreed to build a new STP and take the existing STP offline to ensure consistent permit compliance and ensure the long-term viability of the mobile home park. Woodbridge has signed a contract with an engineering firm, WW Associates, to design and construct the new STP. To offset the cost of construction Woodbridge intends to expand the mobile home park from 98 to 131 units. To mitigate violations that result from increased flows during heavy rain events, ESS has developed an interim storm water mode for the existing STP to run on during the construction of the new STP. When higher amounts of influent are anticipated the aeration tanks will be pumped down and a portion of the influent will be bypassed to an old polishing pond. After the storm event influent will either be pumped from the polishing pond to the headworks for preliminary treatment or pumped and hauled to a nearby wastewater treatment facility. The proposed Order requires Woodbridge to: (1) complete construction of a new STP; (2) take the existing STP offline; and (3) submit revisions to the Operations and Maintenance (O&M) Manual to include the interim storm water mode for the existing STP. Civil charge: 5,500

Town of Fincastle, Botetourt County - Consent Special Order w/ Civil Charges: The facility is a municipal sewage treatment plant. The Town did not meet its obligation to submit a complete permit renewal application on time and also did not meet monitoring and other submittal requirements of its VPDES Permit. It has also exceeded Permit discharge limits, submitted incomplete DMRs, and experienced overflows of sewage to State waters. The Town is in violation of Virginia Code § 62.1-44.5, its Permit, and the VPDES regulations. It failed to submit quarterly Water Quality Standards monitoring results for total nitrogen and total phosphorus, failed to submit a complete permit application by the required date, failed to comply with effluent limits for BOD during April of 2005, and had unauthorized discharges of raw sewage to State waters on November 10th and November 27, 2005 and on March 2, 2006. It is also in violation of regulatory requirements for submitting an incomplete DMR and for failure to provide the average loading data for Total Phosphorus, Total Nitrogen, and Phosphorus in Total Orthophosphate for February 2006 and for not submitting a new O&M manual by the due date. The Town has taken appropriate corrective actions to correct the deficiencies noted above and other measures to assure that the violations do not reoccur. The Order only requires the Town to pay a civil charge for the violations. Civil charge: $1,470

Town of Stuart/Town of Stuart Wastewater Treatment Plant, Patrick County - Consent Special Order w/ Civil Charges: The Stuart Wastewater Treatment Plant, owned and operated by the Town of Stuart, is permitted under VPDES Permit Number VA0022985. The permit was most recently reissued on August 21, 2003 and expires on August 20, 2008. Department compliance staff conducted technical and laboratory inspections on June 6, 2000, January 25, 2002, and August 20, 2003. All three inspections noted apparent deficiencies in the operation and maintenance of the Facility. The deficiencies and suggestions for corrective actions were communicated to the Town via copies of the inspection reports. The Town failed to correct the operational and maintenance deficiencies as requested by the Department in the inspection reports. Department compliance staff conducted a technical and laboratory inspection at the Town of Stuart's wastewater treatment plant on February 27, 2006. On April 10, 2006, the Department issued Notice of Violation No. W2006-04-W-0003 to the Town of Stuart for technical and laboratory violations at the wastewater treatment plant observed during the February 27, 2006 technical and laboratory inspection. The Town worked with the Department to correct the deficiencies at the Facility and all deficiencies noted in the February 2006 Notice of Violation were corrected by August 2006. The Consent Special Order requires the Town to pay a civil penalty for the deficiencies specified in the Notice of Violation. Civil charge: $2,940

Western Virginia Water Authority, Roanoke - Consent Special Order Amendment: The Board issued a consent special order the Western Virginia Water Authority (WVWA) on March 18, 2005. The 2005 Order included extensive requirements for upgrades of the Roanoke Regional Water Pollution Control Plant and the collection system serving that Plant. One major project specified in the 2005 Order is prevention of overflows in the Garst Mill Park area in Roanoke County. In the process of planning for the Garst Mill Park project, the Authority has discovered that problems in the collection system in that area are much more extensive than originally anticipated. The project will therefore cost more and will take longer than planned. The Authority has accordingly requested an extension to the deadline for completion of the Garst Mill Project. The Authority has also requested the following: modification of its Total Kjeldahl Nitrogen limits during certain phases of construction; adjustment of sampling protocol for Total Residual Chlorine during construction; modification of the Total Suspended Solids limits in the 2005 Order to conform to the new limits authorized by a recent Permit modification; correction of typographical errors in the 2005 Order.

Colonna's Ship Yard, Incorporated, Norfolk - Consent Special Order with Civil Charge: Colonna's Ship Yard, Incorporated ("Colonna") owns and operates a vessel repair and maintenance facility in Norfolk. The Facility VPDES permit authorizes Colonna to discharge process wastewater and storm water runoff associated with regulated industrial activity from permitted outfalls. On March 6, 2006, DEQ staff inspected Colonna and documented deficiencies of Permit and BMP conditions which included failure to prevent work debris from falling into state waters, evidence of containment oil leaks, and failure to use protective devices and proper controls during paint operations to prevent releases into the environment. On March 10, 2006, DEQ staff conducted a followup inspection and documented additional deficiencies of Permit and BMP conditions, including failure to control spent abrasive material from falling into state waters, paint residue falling into the river during high winds, and a hose water discharge carrying spent abrasive blast material toward the river. Additionally, the fourth quarter 2005 DMR had been found to be deficient. Colonna was advised of the above

referenced Permit, BMP, and DMR deficiencies in a Notice of Violation issued on April 12, 2006. Civil charge: $5,000

Sims Group USA Corporation, Chesapeake - Consent Special Order with Civil Charge: Sims Group USA Corporation ("Sims") owns and operates a scrap metal recycling facility ("Facility") in Chesapeake. The VPDES permit authorizes Sims to discharge storm water associated with industrial activities. On May 4, 2006 DEQ received a pollution report from Sims, indicating that approximately 100 to 200 gallons of diesel fuel had been spilled that day to tidal waters within the Facility drag slip. In response to the report, DEQ staff inspected the Facility on May 4, 2006. The inspection of the spill area and discussion with Sims personnel confirmed that the spill had occurred when a Sims crane operator ruptured a barge oil tank while cutting with a mechanical shear. During the inspection, DEQ staff observed diesel fuel and an oily sheen in the water and on bank sediments between the barge and the final spill containment boom. Sims had attempted to contain the spill by deploying booms and absorbent pads, as well as pumping oil and oily water from the barge and surrounding area. During a followup inspection on May 9, 2006, DEQ staff again noted an oily sheen on the water and adjacent shoreline and requested sediment removal at that time. A final DEQ site visit on May 11, 2006 documented the sediment removal and confirmed completion of the diesel fuel spill cleanup action. In a May 9, 2006 report to DEQ, Sims estimated that the actual volume of the May 4, 2006 diesel fuel spill was approximately 1,500 gallons. Prior to the May 4, 2006 diesel fuel spill, DEQ inspected the Facility on March 16, 2006 and noted some activity that appeared to be barge scrapping. However, Sims denied that scrapping operations were being conducted at that time. Subsequently, in correspondence dated June 2, 2006 and at a June 22, 2006 meeting, Sims confirmed that barge scrapping had occurred, including the barge noted during the March 16, 2006 inspection. Sims was not authorized under the VPDES permit to scrap barges. Sims submitted on June 22, 2006 to DEQ a revised registration statement for coverage under the VPDES permit for marine wrecking/ships for scrap. Sims was advised of the above referenced observations in a Notice of Violation issued on May 23, 2006. The order requires payment of a civil charge and compliance with all VPDES permit conditions. The order also requires Sims to perform a Supplemental Environmental Project (SEP). Civil charge and SEP: Sims is being assessed a civil charge of $23,000 for release of oil to state waters and the unauthorized ship breaking activities that led to the release. Sims will conduct a SEP to offset $12,000 of the civil charge. The SEP will be a wetland restoration by the Elizabeth River Project at a site near the Facility. Sims will pay the remaining $11,000 as a civil charge.

Whispering Pines, Inc., Accomack County - Consent Special Order with Civil Charge: Whispering Pines, Inc. ("WPI") owns and operates the Whispering Pines Motel ("motel") in Accomack County. The motel is serviced by a wastewater treatment plant ("plant") which is subject to the Permit. The Permit authorizes WPI to discharge 0.019 million gallons per day of domestic wastewater from the plant; however, due to low flows, the plant effluent is routed to an infiltration/evaporation basin. The Permit requires WPI to follow a compliance schedule for plant maintenance and upgrade, for chlorine contact tank relocation, and for installation and monitoring of groundwater wells. On or about August 10, 2005, DEQ compliance staff conducted a review of agency files and determined that WPI had failed to meet, or would be unable to meet deadlines for activities required in the compliance schedule. While WPI has since submitted plans for addressing the upgrades, none of the work has been conducted, and all of the deadlines in the compliance schedule have passed. The Permit also requires that WPI submit to DEQ a completed discharge monitoring report ("DMR") for each of its permitted outfalls not later than the tenth day of the month following the monitoring period. DEQ received WPI's DMR for outfall 101 for the December 2005 monitoring period on January 17, 2006. This DMR was incomplete; however WPI submitted a corrected DMR on February 8. WPI submitted the DMR for the February 2006 monitoring period on March 16, 2006. A WPI responsible party executed the proposed order on October 20, 2006. The order requires payment of a civil charge and compliance with all permit conditions. In addition, the order includes a revised, but significantly compressed compliance schedule for implementing the required plant upgrades and groundwater monitoring program. Civil charge: $4,000

Haysi Sewage Treatment Plant, Dickenson County - Consent Special Order: The Dickenson County PSA owns and operates the Haysi STP and associated collection lines pursuant to VPDES Permit No. VA0067571, which was reissued on September 18, 2003 and expires on September 17, 2008. The Authority has reported a number of final effluent limit violations over an extended period of time. The permit is in the process of being

modified to address upgrade and expansion of the facility. The Authority has reported a number of final effluent limit violations over an extended period of time. Most violations were of BOD_5 and TSS final effluent limits, with some violations of the Ammonia limit. Responses to NOVs written identified Inflow and Infiltration (I&I) and management of solids as the reasons for most violations. I&I and management of solids have also been cited in both technical and compliance inspections. One incident of an unreported unusual or extraordinary discharge and several maintenance issues have also been cited in the NOVs. The Authority has also reported one unusual or extraordinary discharge, a bypass and several overflows within the present permit cycle. One chlorine contact tank (No. 1) was out of service for over one year. Repair and return of the offline chlorine contact tank to service was critical. Detention time is shortened when one chlorine contact tank is not in service. The problem is also compounded when high flows are recorded at the plant. The chlorine contact tank was recently repaired. Repair of sludge drying bed roofs has not been done. The Authority has depended on the use of one portable belt press, shared between several facilities, for removal of solids. However, drying beds available for wasting of sludge were not utilized or maintained. Repair of sludge drying bed roofs had been cited in both technical and compliance inspections. DEQ was told in 2005 that the drying beds were no longer used for sludge dewatering. With receipt of the DMR for January, 2005, Part I, Section F.1 of VPDES Permit No. VA0067571 was activated. This section of the permit requires written notification and submittal of a plan of action to ensure continued compliance with the permit when the average monthly flow values reported for three consecutive months are greater than 95 percent of the design capacity of the Facility. DMRs for November and December, 2004 and for January, 2005 reported average monthly flow values greater than 95 percent of the design capacity of the Facility. Submittal of a plan of action to ensure continued compliance with the permit is required within 90 days from the third consecutive month that greater than 95 percent average monthly flow values are reported. Several meetings were held with PSA personnel. A plan of action was not received within the 90 day time frame. However, a Preliminary Engineering Report (PER) for upgrade and expansion of the present Facility was received by DEQ on September 26, 2005. A Revised PER was received by DEQ on February 3, 2006, and approved by letter dated March 1, 2006. The PSA is in the process of securing approximately $2 million to expand the plant's design capacity from 0.100 MGD to 0.200 MGD. Included in the project is the construction of a 0.167 MGD pretreatment/flow equalization basin to address concerns of high influent flows and high influent BOD values. Also included is the purchase of a sludge press system, and construction of associated housing for the system, to be completed under an accelerated timeframe.

BR-1998, L.L.C. d/b/a/ Brook Ridge Apartments, Richmond - Consent Special Order – w/Civil Charges: Brook Ridge Apartment Complex has a pump station on site that allows the complex to discharge into Henrico County's sewage collection system. BR-1998, L.L.C. owned and operated the apartment complex on February 21, 2006, when a pump failed in the pump station and caused a discharge of sewage to enter state waters. The discharge was not reported to DEQ. Shortly after the discharge, the apartment complex was sold to Royce Affiliates who immediately completed the necessary repairs to prevent further unauthorized discharges. A Notice of Violation was issued to BR-1998 L.L.C. on March 14, 2006 for the unpermitted discharge and for failure to report it. Since the pump has been repaired by the new owners and there are no other outstanding requirements, the Order only requires the payment of a civil charge. Civil charge: $15,500

Lee's Mobil, Inc., Hanover County - Consent Special Order – w/Civil Charges: Lee's Mobil Service is a gasoline service station that has a small package plant receiving domestic sewage from only the service station. The facility has a flow less than 1000 gpd which qualifies Lee's Mobil for a Domestic General Permit. On February 2, 2006, the Department issued Lee's Mobil a NOV for O&M deficiencies, failure to maintain a maintenance contract with an operator, failure to collect and analyze samples for permit compliance, and failure to install dechlorination equipment. Department staff collected three samples in November 2005 for fecal coliform and the analysis indicated three permit effluent violations. Analyses from upstream and downstream samples indicate that the discharge from Lee's Mobil has contributed to fecal impairment in the stream. The Order requires Lee's Mobil to cease discharging from the wastewater treatment system and begin collecting and transporting (pump and haul) wastewater to a regional wastewater treatment system. Lee's Mobil must maintain receipts and records of all pump and haul activities and keep them on site for review. In addition, Lee's Mobil must obtain and provide the Department a copy of a letter of agreement between Lee's Mobile Inc. and Hanover County for the connection to the County's Regional Wastewater Treatment Plant. The connection must be completed by October 1, 2008. Civil charge: $1,000

Powhatan County Fighting Creek WWTP - Consent Special Order - w/ Civil Charges: Powhatan County owns and operates the Fighting Creek Wastewater Treatment Plant (WWTP). It was built in 2001 as a regional treatment plant with new technology to treat the elementary and middle schools wastewater discharge, some local industry, and was designed for future growth. Due to the over-designed plant and low strength of the influent flow, the County experienced difficulties operating the plant. In May 2003, the Department issued a NOV to the County for the failure of the Fighting Creek WWTP to comply with TKN, TSS, and CBOD effluent limits in the Permit. To address the violations, the County hired a consultant to assist in adjusting the system and to maximize the treatment efficiency. The plant continued to experience problems with treatment efficiency. The Department issued several NOV's to the County for failure to meet Permit effluent limits, that included TKN, TSS, CBOD, DO, fecal coliform, and for failure to submit reports. Powhatan County has been in compliance with the effluent limitations in the Permit since October 2005. The Order requires that the County provide DEQ with a survey of the Industrial/Commercial Users discharging to the WWTP and pay a civil charge. Civil charge: $7,980

Skyline Swannanoa, Inc., Augusta County - Consent Special Order with Civil Charge: Skyline Swannanoa, Incorporated, owns and operates Skyline Swannanoa Sewage Treatment Plant. The Facility is located in Augusta County, Virginia. The Facility is the subject of VPDES Permit No. VA0028037 issued June 25, 2001.On February 5, 2002, DEQ issued Warning Letter W2002-01-V-1010 to Skyline Swannanoa, Incorporated, for failure to submit either an existing or new O&M Manual for review and approval. On May 3, 2005, August 12, 2005, October 17, 2005 and November 9, 2005, DEQ issued Warning Letters to Skyline Swannanoa, Incorporated, for failure to discharge in accordance with the VPDES permit. On December 21, 2005, DEQ issued Notice of Violation W2005-12-V-0006 to Skyline Swannanoa, Incorporated, for pH, Cl2, TSS and total zinc effluent limitation violations during the period from May to October 2005. On February 3, 2006, DEQ issued Notice of Violation W2006-02-V-0006 to Skyline Swannanoa, Incorporated, for TSS and total zinc effluent limitation violations during November 2005. On February 21, 2006, DEQ issued Notice of Violation W2006-02-V-0015 to Skyline Swannanoa, Incorporated, for Cl2 and TSS effluent limitation violations during December 2005. The NOV also cited the failure to provide a complete VPDES Permit application by December 25, 2005. On March 17, 2006, DEQ issued Notice of Violation W2006-03-V-0010 to Skyline Swannanoa, Incorporated, for total zinc effluent limitation violations in January 2006. This violation was not added to the penalty matrix due to the Notice of Violation being issued after Skyline Swannanoa, Incorporated, was involved in settlement discussions. The proposed Order, signed by Skyline Swannanoa on June 16, 2006, would require Skyline Swannanoa to remove accumulated sludge in the system, repair/replace the sludge handling pump and to provide a report containing a plan and schedule of corrective actions to address the zinc effluent violations. The Order would also include a civil charge. Civil charge: $6,500

Smiley's Fuel City, LLC., Rockbridge County - Consent Special Order with Civil Charge: Smiley's Fuel City, LLC owns and operates Smiley's Fuel City. The Facility is a truck stop located in Rockbridge County, VA. The Facility is the subject of VPDES Permit No. VA0058734 issued August 25, 2005. On May 10, 2005, DEQ issued Notice of Violation W2005-05-V-0013 to Smiley's for exceeding effluent limits and failure to submit VPDES permit application before 180 days prior to the Permit expiration. On June 9, 2005, DEQ issued Notice of Violation W2005-06-V-0010 to Smiley's for failure to submit a complete DMR and for effluent limitation violations. On June 15, 2005, DEQ issued Warning Letter W2005-06-V-1053 to Smiley's for the contract laboratory refusing to provide demonstrations of required laboratory procedures. On June 26, 2005, VPDES Permit No. VA0058734 expired. On July 19, 2005, DEQ issued Warning Letter W2005-07-V-0008 to Smiley's for failure to submit a complete VPDES application for Permit reissuance, discharging to state waters without an authorized effective permit and exceeding the effluent limits set forth in the Permit. On August 15, 2005, DEQ issued Notice of Violation NOV-05-08-VRO-001 to Smiley's for discharging without an effective permit in July 2005. On August 25, 2005, DEQ approved and reissued the VPDES Permit No. VA0058734. On November 9, 2005, DEQ issued Warning Letter W2005-11-V-1002 to Smiley's for failure to submit DMRs. On December 21, 2005, DEQ issued Warning Letter W2005-12-V-1020 to Smiley's for failure to submit DMRs. On February 21, 2006, DEQ issued Notice of Violation W2006-02-V-0013 to Smiley's for failure to submit DMRs. On March 17, 2006, DEQ issued Notice of Violation W2006-02-V-0013 to Smiley's for failure to

submit DMRs. The proposed Order, signed by Smiley's on June 16, 2006, would require Smiley's to pay a civil charge. Civil charge: $4,720

Alvin R. Moomau, Augusta County - Consent Special Order w/Civil Charges: Alvin R. Moomau owns two underground storage tank (UST) facilities located at 4201 and 4544 Lee Jackson Highway, Greenville, Virginia. Mr. Moomau stores petroleum in these USTs under the requirements of 9 VAC 25-580-10 et seq. Underground Storage Tanks: Technical Standards and Corrective Action Requirements (UST Regulation). The UST Regulation requires that owners of UST facilities protect USTs from corrosion, perform release detection on the USTs, properly register the USTs, properly close non-compliant USTs, and maintain compliance records for DEQ review. An April 14, 2005, inspection of the facilities revealed that Mr. Moomau had failed to: 1) protect metallic portions of the UST piping from corrosion, 2) perform release detection on the USTs, 3) maintain compliance records available for review by DEQ staff, and 4) comply with the requirements for financial assurance for the USTs. DEQ issued a Warning Letter (WL) to Mr. Moomau on May 20, 2005. Receiving no response, DEQ sent Mr. Moomau a Letter of Agreement (LOA) which he entered into on September 27, 2005. The LOA required compliance with the UST Regulation by December 31, 2005. The owner failed to comply with the UST regulation. DEQ staff issued a Notice of Violation (NOV) to Mr. Moomau, dated March 2, 2006, for the alleged violations. The owner met with DEQ staff three times over the next 90 days to discuss resolution of the alleged violations, the NOV and the draft CSO. Mr. Moomau agreed to a corrective action plan for the violations and signed a Consent Special Order on August 15, 2006.
DEQ staff received documentation resolving the remaining deficiencies for the USTs on October 11, 2006. All alleged violations noted in the NOV have been resolved in accordance with the conditions of Appendix A in the Order. Civil charge: $6,000

Mr. R.L. Bowman, Isle of Wight County - Consent Special Order with Civil Charge: Mr. Bowman owns a 155.1 acre tract of land comprised of six adjacent parcels in Isle of Wight County ("Property"). The Property contains wetlands that are part of Rattlesnake Swamp, a tributary to the Blackwater River. Reports obtained by DEQ indicate that logging operations on the Property commenced July 20, 2005 and concluded in late August or early September of 2005. The US Army Corps of Engineers (ACOE) confirmed a wetland delineation on the Property on March 9, 2006, documenting 104.7 acres of non-tidal palustrine forested wetlands, including three vernal ponds. In response to a notification from the ACOE, DEQ inspected the Property on March 22, 2006. During the site visit, logging firm personnel told DEQ staff they had constructed access roads to five of the six parcels at Mr. Bowman's request. The roads were cut after most of the logging had been completed and were not used for timber harvesting purposes. Based on the wetland delineation confirmed by ACOE, four of the five access roads on the Property were constructed in wetlands. DEQ communications with Virginia Department of Forestry staff revealed that the four access roads were not constructed in accordance with best management practices (BMPs) mandatory for logging in a wetland. Additionally, an existing logging road on the Property was 8-10 feet too wide to conform to BMPs and woody debris was piled along both sides of the road and an adjacent log landing deck, constituting unauthorized fill in a wetland. Therefore, the construction of the four access roads does not meet the silivicuture activity exemption provided for in the Virginia Water Protection Program Regulation. Activities associated with construction of the roads resulted in approximately 1.4 acres of wetland impacts. Mr. Bowman does not have a permit from DEQ to impact wetlands on the Property. The order requires payment of a civil charge and restoration of the 1.4 acres of unauthorized wetland impacts in accordance with a plan to be approved by DEQ. Mr. Bowman signed the proposed order on October 18, 2006. Civil charge: $7,000

Grayco, Inc., Isle of Wight County - Consent Special Order with Civil Charge: In 2001, Grayco obtained a Virginia Wetland Protection Permit for wetland impacts associated with the development of a residential subdivision called Founder's Pointe in Isle of Wight County. Recently, Grayco sold the Property to East West Partners, the firm that is now constructing Founder's Point. Grayco did not transfer the wetland permit to East West Partners when it conveyed the Property. The wetland permit allows 1.19 acres of impacts to non-tidal forested wetlands and requires Grayco to mitigate for these impacts. Part of the specified mitigation includes preservation of 6.45 acres of upland forested buffer on the development site. These buffers, which border a number of separate headwater wetlands, were required to be 30 feet wide, and were preserved in perpetuity by deed restrictions. On May 9, 2006, DEQ staff inspected the Founders Pointe property to assess compliance with

the permit. DEQ staff observed that all vegetation in 30-foot buffer was removed with the exception of a few trees, that buffers were not flagged as required, and that soil had started migrating into the buffers and toward wetlands. By letter date May 8, 2006, East West Partners confirmed that bush-hogging occurred within the buffers. DEQ staff estimates that approximately 1.3 acres of deed restricted buffer were bush-hogged or excessively thinned. Additionally, Grayco has not completed the wetland mitigation required by the permit and allowed the permit to expire before applying for a renewal. The order requires payment of a civil charge and compliance with all permit conditions. In addition, Grayco must restore the impacted buffer areas, and purchase 0.09 acres of mitigation credits from a wetland mitigation bank serving the watershed. A Grayco responsible party executed the proposed order on September 15, 2006. Civil charge: $13,500

Hearndon Construction Corp., Chesapeake - Consent Special Order with Civil Charge: Hearndon Construction Corp. (Hearndon) is constructing a residential subdivision called Ship's Landing in Chesapeake. The site contains wetlands adjacent to Deep Creek, a tributary to the Southern Branch of the Elizabeth River. The Permit allows impacts to 2.628 acres of non-tidal forested wetlands, and 0.243 acres of non-tidal scrub-shrub wetlands. On May 31, 2006 DEQ staff conducted a site visit at the Property to assess compliance with the Permit and observed the following: i) Hearndon did not notify DEQ prior to beginning construction activities and impacting wetlands. ii) DEQ had not received final construction plans or construction monitoring reports. iii) DEQ had not received pre-construction photographic monitoring reports. iv) DEQ had not received nor had it approved the final compensation plan from Hearndon. v) Clearing of a wetland had occurred outside of the permitted impact area. vi) Clearing of forested uplands that were to be preserved by deed restriction had occurred. vii) Hearndon failed to properly demarcate surface waters and upland buffers in preservation areas. During a site visit conducted June 2, 2006, DEQ staff documented the clearing and grading of several areas of wetlands and uplands that was not authorized by the Permit. A small amount of sediment had also been discharged to a wetland area from a stormwater discharge structure installed in the preservation area. DEQ staff also noted that culverts intended to maintain the hydrological connection of preserved wetlands on site to the larger wetland system downstream were placed in a manner that blocked surface flow. Additionally, sediment deposits constituting unauthorized fill were observed in a wetland, adjacent to the outfall of an improperly situated stormwater discharge pipe. Further, an area of wetlands adjacent to a stub road on the property had been cleared in violation of the Permit. By letter dated June 29, 2006, Hearndon notified DEQ that it had impacted 0.593 acres of forested wetlands that was not authorized by the Permit and 0.996 acres of deed restricted uplands. A Hearndon responsible party executed the proposed order on October 23, 2006. Civil charge: $11,550

The Hanover Group, LLC, Hanover County - Consent Special Order - w/ Civil Charges: A permit was issued to The Hanover Group on May 9, 2002, to develop a 305 acre subdivision known as Bluffs at Bell Creek and the commercial/retail/light industrial business park known as Bell Creek Park in Hanover County. On August 27, 2003, DEQ, the Corps, Mr. Shield representing The Hanover Group, and his contractor/consultant met onsite to conduct a site inspection. During that inspection, DEQ staff observed severe erosion problems on an empty lot located above an unnamed tributary (UT) to Totopotomoy Creek. Severe erosion was observed on the back slope of the lot – silt fencing was not maintained or properly installed. No other form of erosion and sediment (E&S) control structures were in place. During the inspection, Mr. Shield and his consultant agreed that by September 5, 2003, they would maintain the silt fence, install check dams, stabilize the slope with seed, and install and maintain straw bales. DEQ staff performed a site visit on September 8, 2003, and observed E&S controls were not installed. DEQ staff made another site visit on September 15, 2003, and observed that the straw bales were installed, but not maintained, the silt fence was not maintained and no other E&S controls were installed. During the last two site visits of September 8th and 15th, DEQ staff observed that additional sediment had moved into the stream due to the failure to install and maintain the E&S controls. Additional site inspections were conducted in 2003, 2004, 2005, and 2006 each documenting additional impacts to state waters resulting from inadequate E&S controls. A NOV was issued on March 9, 2004 and April 27, 2006 citing the above violations. The Order requires The Hanover Group to restore areas of unauthorized impacts to an upland buffer area, an unnamed tributary to Strawhorn Creek, and an unnamed tributary to Totopotomoy Creek. In addition, the order requires the payment of a civil charge. Civil charge: $22,200

Vaughn & Jackson L.L.C., Roanoke County - Consent Special Order w/ Civil Charges: The Company has a VWP permit with which they experienced continuous delays in meeting Permit submittal/filing deadlines, and numerous other operational requirements. The submittal/filing delays alone left DEQ in a position of not being able to provide assurances that the property was not being further changed or modified in an unapproved manner. The Company failed to provide proper oversight of its contractors in administering their Permit Storm Water Pollution Prevention Plan (SWPPP) and the requirements for adhering to that SWPPP. Additionally, the Company has failed to place any emphasis on the need for compliance since receiving the first NOV and continued in unacceptable practices. The Company continued to operate with additional significant deviations from the Permit requirements, law, and regulations as shown by a second unauthorized dewatering event despite assurances from the owner that this would not reoccur. A third dewatering event took place in the presence of DEQ staff on August 30, 2006. Additionally, they failed to address the existing problems identified in the first NOV and the second and third NOVs identified more of the same type of problems, at different locations, as had been specified in the first NOV. A biological evaluation of Back Creek identified five families of macroinvertebrates that were absent at the impact site as compared to the reference site just upstream of the point of discharge into Back Creek. Very noticeable differences were observed between the reference and impact sites. In the Creek below the point of discharge, the spaces between the rocks are choked with sand and fine particles resulting in the area just below the discharge now useful as a glide (shallow with uniform depth and flow) habitat only. At the reference site, benthic macroinvertebrates were collected in the riffle areas among cobbles and boulders as well as in leaf packs. However, in the impacted area the dominant habitats for the benthic macroinvertebrates are leaf packs and snags because the substrate where they would normally thrive is now surrounded by sediment. This has resulted in an immediate water quality impact and eventually, the benthic macroinvertebrate community will change as a result of this habitat shift. An on-site wetland was also impacted by erosion and sedimentation control implementation failures. The Order requires the payment of a civil charge and corrective remedial actions to Back Creek and an on-site wetland. Since the signing of the Order the Company has come into compliance with Permit requirements and is following the Corrective Action Plan. Civil charge: $47,250

~~**Amendment to the Aboveground Storage Tank (AST) and Pipeline Facility Financial Responsibility Requirements**~~: Section 62.1-44.34:16D of the State Water Control Law authorizes the Board to promulgate regulations requiring operators of AST facilities and pipelines to demonstrate financial responsibility based on the total storage capacity of all facilities operated within the Commonwealth. The department is recommending the AST financial responsibility regulations be amended to provide operators a more affordable way to demonstrate AST financial responsibility. The recommendation is being made in order to further pursue the goals of the regulation while continuing to comply with existing statutory direction. Specifically, the department is investigating ways to reduce the cost of compliance with the regulation by proposing modified compliance requirements. This will, in effect, reduce the costs associated with achieving and maintaining compliance with the regulation. The department will propose language to clarify how the Virginia Petroleum Storage Tank Fund is used to reimburse tank operators for the cost of containment and cleanup of a petroleum release from an AST. The department will also propose administrative changes to the regulation that will clarify existing requirements within the regulation.

FY 2007 Virginia Clean Water Revolving Loan Fund Authorizations: Title IV of the Clean Water Act requires the yearly submission of a priority funding list and an Intended Use Plan in conjunction with Virginia's Clean Water Revolving Loan Fund Capitalization Grant application. Section 62.1-229 of Chapter 22, Code of Virginia, authorizes the Board to establish to whom loans are made, the loan amounts, and repayment terms. The next step in this yearly process is for the Board to set the loan terms and authorize the execution of the loan agreements. At its September, 2006 meeting, the Board targeted 20 projects totaling $300,072,118 in loan assistance from available and anticipated FY 2007 funding and authorized the staff to present the proposed funding list for public comment. A public meeting was convened on November 9th. Notices of the meeting were mailed to all loan applicants and advertised in six newspapers across the state. All comments received in response to the notice were in support of the projects targeted for assistance. The staff has conducted initial meetings with the FY 2007 targeted recipients and has finalized the associated user charge impact analyses. Based on discussions at these meetings, one change has been made to the funding list. The Town of Washington has requested an increase to their loan amount from $3,000,000 to $4,000,000, which the staff supports. This

brings the total loan amount for the 20 projects being recommended for authorization to $301,072,118. In accordance with the residential user charge impact analysis conducted for each project, the loan rates and terms listed below are submitted for Board consideration. Once approved, this information and the approved interest rates will be forwarded to the Virginia Resources Authority (VRA) for concurrence and recommendation. VRA will prepare the credit summaries and financial capability analyses on the recipients authorized for FY 2007 funding, looking at their repayment capability and individual loan security requirements. The true interest cost on municipal 20-year revenue bonds is currently in the 4.0% range. The program establishes its VCWRLF ceiling rate on wastewater loans to stay approximately 1% below the current municipal bond market rates. Therefore, we are recommending that the ceiling rate for the FY 2007 wastewater projects be set at 3.0%.

FY 2007 Proposed Interest Rates and Loan Authorizations

	Locality	Loan Amount	Rates & Loan Terms
1	City of Lynchburg	$ 3,000,000	0%, 30 years
2	City of Richmond	$ 2,082,000	3%, 20 years
3	Town of Woodstock	$ 9,729,032	0%, 20 years
4	Town of Onancock	$ 6,200,000	0%, 20 years
5	Harrisonburg/Rockingham RSA	$30,000,000	3%, 20 years
6	Frederick/Winchester SA	$27,091,000	3%, 20 years
7	City of Waynesboro	$14,594,900	0%, 20 years
8	City of Richmond	$ 2,000,000	3%, 20 years
9	Alleghany County	$ 11,943,000	0%, 20 years
10	Town of Tappahannock	$ 5,060,000	0%, 20 years
11	Arlington County	$ 80,000,000	3%, 20 years
12	City of Staunton	$ 7,239,672	3%, 20 years
13	City of Norfolk	$ 17,000,000	0%, 20 years
14	Prince William Service Authority	$ 45,000,000	3%, 20 years
15	Augusta County SA	$ 13,376,389	3%, 20 years
16	Town of Purcellville	$ 17,302,000	3%, 20 years
17	Town of Washington	$ 4,000,000	0%, 20 years
18	Town of Chilhowie	$ 1,584,125	0%, 20 years
19	City of Newport News	$3,200,000	3%, 20 years
20	Hanover County	$ 670,000	0%, 20 years
	Total Request	**$ 301,072,118**	

The staff will update its rates and term recommendations at the Board's December meeting should additional information provided by the loan recipients warrant changes.